Appendix C
Best Management Practices, Design Features, and State and BLM FO-specific Stipulations, and Forest Standards and Guidelines

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Introduction

This appendix includes the following five sections:

Section C.1: Westwide Energy Corridor Final Programmatic EIS Best Management Practices

The table included in Section C-1 outlines the best management practices (BMPs)obtained from the Record of Decision (ROD) for the Westwide Energy Corridor (WWEC) that would be applied to all portions of the proposed transmission line to reduce impacts to resources. These practices are organized by resource tables and include resource subtopics and the project phase (planning, construction, operation, and decommissioning phases) during which each BMP would be implemented. The BMPs address specific environmental impacts or localized conditions, and would be prescribed on a case-by-case basis. Typically, the applicability of selective BMPs to a given action is determined in the course of the environmental analysis and during the engineering and design phase of a Project.

Section C.2: Applicant-committed Design Features (DFs)

The table included in Section C-2 outlines the applicant-committed environmental protection measures or design features (DF) proposed by the Applicant, TWE, that are being taken into account to further reduce impacts to resources. These may be similar to or more restrictive than the BMPs or stipulations contained in the land use plans.TWE will continue to review BMPs in connection with the environmental and engineering studies for the proposed and alternative transmission line routes identified for the Project and prepare updated tables identifying generic and selective BMPs for the Project.

Section C.3: State and BLM Land Use Stipulations Applicable to Transmission Line ROWs

The tables in Section C-3 identify the following BLM or State use stipulations:

- No Surface Use (NSU) areas: These are where surface use would not be permitted, or areas where permanent structures are not allowed and include all identified ROW exclusion areas.
- Controlled Surface Use (CSU) areas: These stipulations include all identified ROW avoidance areas or other areas where surface is permitted but requires adherence to certain constraints (for example, use of certain construction methods, commitments for surveys, etc.).
- Timing Limitation (TL) areas: There stipulations identify areas where surface use is not allowed during time periods key to a specific resource. These stipulations may also include an avoidance buffer (for example, a restriction on surface use within a 0.25 miles from raptor nests during the nesting period).

The stipulations contained in this section were compiled from each BLM RMP through which the proposed transmission line passes. NSU, CSU, and TL stipulations are organized by management area (State or BLM FO).The 15 BLM FOs that the proposed transmission line corridor crosses are as follows:

- Wyoming: Rawlins and Rock Springs FOs.
- Colorado: Little Snake, Grand Junction, and White River FOs.
- Utah: Vernal, Moab, Price, Richfield, Salt Lake, Fillmore, Cedar City, and Saint George FOs.
- Nevada: Ely District/Caliente FO; Las Vegas FO.

In addition, **Figures C-1** through **C-4** identify NSU areas by Region. CSU stipulations are not mapped because surface use is not prohibited in these areas. It is important to note that each FO RMP contains other BMPs or Standard Design Practices to be applied to surface-disturbing activities. Due to the sheer

number of these BMPs, Appendix C does not include a full BLM list by FO; however, each of the FO subsections contained in Section C-3 identifies the RMP and applicable appendices where these can be located.

Section C.4: Applicable USFS Standards and Guidelines

The proposed transmission line crosses portions of five national forests within in Utah: Ashley, Manti-La Sal, Fishlake, Uinta, and Dixie. Within their forest plans (LMRPs), each national forest has developed management units to protect resources or specific opportunities and have provided specific direction, goals, standards, and guidelines for each of those areas.

The tables in Section C-4 identify all management units within the analysis area by national forest, and contain all applicable standards and guidelines for these areas, as provided by the USFS.

Section C.5: Additional Mitigation Measures Prescribed for the TWE Project

The TransWest Express EIS prescribes additional mitigation measures to minimize resource impacts. These mitigation measures go beyond the agency requirements listed in the previous sections and the applicable management plans.

Section C-5 contains a comprehensive listing of the mitigation measures prescribed in the resource sections of the EIS.

C.1 Westwide Energy Corridor Final Programmatic EIS Best Management Practices

Table C.1-1 Westwide Energy Corridor Final Programmatic EIS Best Management Practices

PDEIS BMP No.	WWEC IOP No.	Phase(s)[1]	WWEC IOP Description
Regulatory Compliance			
RC-1	1	P	The appropriate agency, assisted by the applicant, must conduct project-specific NEPA analyses in compliance with Section 102 of NEPA. The scope, content, and type of analysis shall be determined on a project-by-project basis by the Agencies and the applicants.
RC-2	2	P	The appropriate agency, assisted by the project applicant, must comply with Section 106 of the NHPA on a project by-project basis. Consultation with SHPOs, any federally recognized Tribes, and other appropriate parties as per regulations (36 CFR 800) must begin early in the planning process and continue throughout project development and execution. The ACHP retains the option to comment on all undertakings (36 CFR 800.9).
RC-3	3	P	The appropriate agency, assisted by the project applicant, must consult with the USFWS and the NMFS as required by Section 7 of ESA. The specific consultation requirements, as set forth in regulations at 50 CFR Part 402, would be applied on a project-by-project basis. Applicants shall identify known occupied sites, such as nest sites, for threatened and endangered species and special status species.
RC-4	4	P	The appropriate agency, assisted by the project applicant, must coordinate and consult with NMFS regarding potential impacts to essential fish habitat (EFH) as required by the 1996 reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act.
Agency Coordination			
AC-1	1	P	Applicants seeking to develop energy transport projects within corridors located on or near DOD facilities or flight training areas (see Appendix L for applicable corridors) must, early in the planning process and in conjunction with the appropriate agency staff, inform and coordinate with the DOD regarding the characteristics and locations of the anticipated project infrastructure.
AC-2	2	P	Early in the planning process, applicants seeking ROW authorization within a Section 368 energy corridor that is located within five miles of a unit of the NPS should contact the appropriate Agency staff and work with the NPS regarding the characteristics and locations of anticipated project infrastructure. In those instances where corridors cross lands within the boundaries of a unit of the NPS, the National Park Service Organic Act and other relevant laws and policies shall apply.
AC-3	3	P	In those instances where projects using energy corridors are proposed to also cross National Wildlife Refuge System lands, the National Wildlife System Administration Act and other relevant laws and policies pertinent to national wildlife refuges shall apply.
AC-4	4	P	For electricity transmission projects, the applicant shall notify the Federal Aviation Administration (FAA) as early as practicable in the planning process in order to identify appropriate aircraft safety requirements.
AC-5	5	P	All project applications must consider applicable findings, mitigation, and/or standards contained in regional land management plans, such as the Northwest Forest Plan, when such regional plans have been incorporated into agency planning guidelines and requirements. Modification of some standards may be needed to reasonably allow for energy transport within a corridor.
Government-to-Government Coordination			
GG-1	1	P	The appropriate agency, assisted by the project applicant, must initiate government-to-government consultation with affected Tribes at the outset of project planning and shall continue consultation throughout all phases of the project, as necessary. Agencies should determine how to consult in a manner that reflects the cultural values, socioeconomic factors, and administrative structures of the interested Tribes.
GG-2	2	P	The agency POC may require the project proponent to prepare an ethnographic study when Tribal consultation indicates the need. The study shall be conducted by a qualified professional selected in consultation with the affected Tribe.

Table C.1-1 Westwide Energy Corridor Final Programmatic EIS Best Management Practices

PDEIS BMP No.	WWEC IOP No.	Phase(s)[1]	WWEC IOP Description
General			
GEN-1	1	P	Applicants seeking to develop an electricity transmission or pipeline project will develop a project-specific plan of development (POD). The POD should display the location of the project infrastructure (i.e., towers, power lines) and identify areas of short- and long-term land and resource impacts and the mitigation measures for site-specific and resource-specific environmental impacts. The POD should also include notification of project termination and decommissioning to the agencies at a time period specified by the agencies.
GEN-2	2	P	Applicants, working with the appropriate agencies, shall design projects to comply with all appropriate and applicable Agency policies and guidance.
GEN-3	3	P	Project planning shall be based on the current state of knowledge. Where corridors are subject to sequential projects, project-related planning (such as the development of spill-response plans, cultural resource management plans, and visual resource management plans) and project-specific mitigation and monitoring should incorporate information and lessons learned from previous projects.
GEN-4	4	P	Applicants shall follow the best management practices for energy transport project siting, construction, and operations of the states in which the proposed project would be located, as well as federal agency practices.
GEN-5	5	P	Corridors are to be efficiently used. The applicant, assisted by the appropriate agency, shall consolidate the proposed infrastructure, such as access roads, wherever possible and utilize existing roads to the maximum extent feasible, minimizing the number, lengths, and widths of roads, construction support areas, and borrow areas.
GEN-6	6	P	When concurrent development projects are proposed and implemented within a corridor, the agency POCs shall coordinate among projects to ensure consistency with regard to all regulatory compliance and consultation requirements, and to avoid duplication of effort.
GEN-7	7	P	Applicants, assisted by the appropriate agency, shall prepare a monitoring plan for all project-specific mitigation activities.
GEN-8	8	P	Potential cumulative impacts to resources should be considered during the early stages of the project. Agency POCs must coordinate various development projects to consider and minimize cumulative impacts. A review of resource impacts resulting from other projects in the region should be conducted and any pertinent information be considered during project planning.
GEN-9	1	C	To avoid conflict with federal and nonfederal operations, the applicant shall be aware of liabilities pertaining to environmental hazards, safety standards, and military flying areas.
GEN-10	2	C	The applicant shall locate all stationary construction equipment (i.e., compressors and generators) as far as practicable from nearby residences.
GEN-11	3	C	Applicants will pay fair market value to the land management agency for any merchantable forest products that will be cut during ROW clearing. The local land management agency will determine the fair market value, which will be paid prior to clearing. The applicant will either remove the forest products from the area or will stack the material at locations determined by the local land management agency. Treatment of unmerchantable products will be determined by the local land management agency.
GEN-12	1	D	Where applicable, decommissioning activities will conform to agency standards and guidance for mitigation and reclamation (e.g., BLM's Gold Book).
GEN-13	2	D	Applicants shall locate desired projects within energy corridors to promote effective use of the corridors by subsequent applicants and to avoid the elimination of use or encumbrance of use of the corridors by ROW holders. Proposed projects should be compatible with identified energy transport modes and avoid conflicts with other land uses within a corridor.
GEN-14	3	D	Gravel work pads will be removed; gravel and other borrow material brought to the ROW during construction will be disposed of as approved by the agency.
GEN-15	4	D	Any wells constructed on the ROW to support operations will be removed and properly closed in accordance with applicable local or state regulations.

Table C.1-1 Westwide Energy Corridor Final Programmatic EIS Best Management Practices

PDEIS BMP No.	WWEC IOP No.	Phase(s)[1]	WWEC IOP Description
GEN-16	5	D	All equipment, components, and aboveground structures must be cleaned and removed from the site for reclamation, salvage, or disposal; all below-ground components will be removed to a minimum depth of three feet to establish a root zone free of obstacles; pipeline segments and other components located at greater depths may be abandoned in place provided they are cleaned (of all residue) and filled with inert material to prevent possible future subsidence.
GEN-17	6	D	Dismantled and cleaned components will be promptly removed; interim storage of removed components or salvaged materials that is required before final disposition is completed will not occur on federal land.
GEN-18	7	D	At the close of decommissioning, applicants will provide the federal land manager with survey data precisely locating all below-grade components that were abandoned in place.
Project Design			
PD-1	1	P	Applicants shall locate desired projects within energy corridors to promote effective use of the corridors by subsequent applicants and to avoid the elimination of use or encumbrance of use of the corridors by ROW holders. Proposed projects should be compatible with identified energy transport modes and avoid conflicts with other land uses within a corridor.
PD-2	2	P	Applicant shall identify and delineate existing underground metallic pipelines in the vicinity of a proposed electricity transmission line project and design the project to avoid accelerating the corrosion of the pipelines and/or pumping wells.
Soils, Excavation, and Blasting			
SOIL-1	1	C	Applicants shall salvage, safeguard, and reapply topsoil from all excavations and construction activities during restoration.
VEG-1	2	C	All areas of disturbed soil shall be restored by the applicant using weed free native grasses, forbs, shrubs, and trees as directed by the agency. Restoration should not be unnecessarily delayed. If native species are not available, noninvasive vegetation recommended by agency specialists may be used.
SOIL-2	3	C	The applicant must not create excessive slopes during excavation. Areas of steep slopes, biological soil crusts, erodible soil, and stream channel crossings would often require site-specific and specialized construction techniques by the applicant. These specialized construction techniques should be implemented by adequately trained and experienced employees.
WAT-1	4	C	Blasting activities will be avoided or minimized in the vicinity of sole source aquifer areas to reduce the risk of releasing sediments or particles into the groundwater and inadvertently plugging water supply wells.
SOIL-3	5	C	The applicant must backfill foundations and trenches with originally excavated material as much as possible. Excess excavation materials should be disposed of by the applicant only in approved areas.
SOIL-4	6	C	The applicant shall obtain borrow (fill) material only from authorized sites. Existing sites should be used in preference to new sites.
PHS-1	7	C	The applicant shall prepare an explosives use plan that specifies the times and meteorological conditions when explosives will be used and specifies minimum distances from sensitive vegetation and wildlife or streams and lakes.
PHS-2	8	C	If blasting or other noisy activities are required during the construction period, the applicant must notify nearby residents in advance.
Mitigation and Monitoring			
MIT-1	1	C	All control and mitigation measures established for the project in the POD and other required plans must be maintained and implemented by the applicant throughout construction. Necessary adjustments may be made with the concurrence of the appropriate agency.
MIT-2	1	O	All control and mitigation measures established for the project shall be maintained and implemented by the applicant throughout the operation of the project. Necessary adjustments may be made with the concurrence of the appropriate agency.

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PDEIS BMP No.	WWEC IOP No.	Phase(s)[1]	WWEC IOP Description
MIT-3	1	D	All control and mitigation measures established for the project in the POD and other required plans will be incorporated into a decommissioning plan that will be approved by the federal land manager(s); the decommissioning plan will include a site reclamation plan and a monitoring program and will be coordinated with owners and operators of other systems on the corridor to ensure no disruption to the operation of those systems.
Transportation			
TRAN-1	1	P	The applicant shall prepare an access road siting and management plan that incorporates relevant agency standards regarding road design, construction, maintenance, and decommissioning. Corridors will be closed to public access unless determined by the appropriate federal land manager to be managed as part of an existing travel and transportation network in a land use plan or subsequent travel management plan(s).
TRAN-2	2	P	The applicant shall prepare a comprehensive transportation plan for the transport of transmission tower or pipeline components, main assembly cranes, and other large equipment. The plan should address specific sizes, weights, origin, destination, and unique equipment handling requirements. The plan should evaluate alternative transportation routes and should comply with state regulations and all necessary permitting requirements. The plan should address site access roads and eliminate hazards from truck traffic or adverse impacts to normal traffic flow. The plan should include measures such as informational signage and traffic controls that may be necessary during construction or maintenance of facilities.
TRAN-3	3	P	Applicants shall consult with local planning authorities regarding increased traffic during the construction phase, including an assessment of the number of vehicles per day, their size, and type. Specific issues of concern (e.g., location of school bus routes and stops) should be identified and addressed in the traffic management plan.
TRAN-4	1	D	Additional access roads needed for decommissioning will follow the paths of access roads established during construction to the greatest extent possible; all access roads not required for the continued operation and maintenance of other energy systems present in the corridor shall be removed and their footprints reclaimed and restored.
Groundwater			
WAT-2	1	P	Applicants must identify and delineate all sole source aquifers in the vicinity of a proposed project and design the project to avoid disturbing these aquifers or to minimize potential risks that the aquifers could be contaminated by spills or leaks of chemicals used in the projects.
WAT-3	2	P	In instances where a project within an energy corridor crosses sole source aquifers, the applicant must notify the U.S. Environmental Protection Agency (EPA) and the agencies that administer the land as early as practicable in the planning process. Section 1424(e) of the Safe Drinking Water Act and other relevant laws and policies pertinent to the corridors that cross sole source aquifers shall apply.
Surface Water			
WAT-4	1	P	Applicants must identify all wild and scenic rivers (designated by act of Congress or by the Secretary of the Interior under Section 3(a) or 2(a)(ii) of the Wild and Scenic Rivers Act, respectively), congressionally authorized wild and scenic study rivers, and agency identified (eligible or suitable) wild and scenic study rivers in the vicinity of a proposed project and design the project to avoid the rivers or minimize the disturbance of the rivers and their vicinity.
WAT-5	2	P	In instances where a project within an energy corridor crosses a wild and scenic river or a wild and scenic study river, the appropriate federal permitting agency, assisted by the project applicant, must coordinate and consult with the river-administrating agency regarding the protection and enhancement of their free-flowing condition, water quality, and outstandingly remarkable natural, cultural, and recreational values.
WAT-6	3	P	Applicants shall identify all streams in the vicinity of proposed project sites that are listed as impaired under Section 303(d) of the Clean Water Act and provide a management plan to avoid, reduce, and/or minimize adverse impacts on those streams.
WAT-7	1	D	A SWPPP permit will be obtained and its provisions implemented for all affected areas before any ground disturbance activities commence.

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PDEIS BMP No.	WWEC IOP No.	Phase(s)[1]	WWEC IOP Description
Surface and Groundwater Resources			
WAT-8	1	C	The applicant must safeguard the possibility of dewatering shallow groundwater and/or wetland in the vicinity of project sites during foundation excavations or excavations for buried pipelines.
WAT-9	2	C	The applicant must implement erosion controls complying with county, state, and federal standards, such as jute netting, silt fences, and check dams, and secure all necessary storm water pollution prevention plan (SWPPP) permits.
WAT-10	3	C	The applicant shall minimize stream crossings by access roads to the extent practicable. All structures crossing intermittent and perennial streams should be located and constructed so that they do not decrease channel stability, increase water velocity, or impede fish passage.
WAT-11	4	C	Applicants shall not alter existing drainage systems and should give particular care to sensitive areas such as erodible soils or steep slopes. Soil erosion should be reduced at culvert outlets by appropriate structures. Catch basins, roadway ditches, and culverts should be cleaned and maintained.
WAT-12	5	C	Applicants must not create hydrologic conduits between aquifers.
Paleontological Resources			
PAL-1	1	P	The applicant shall conduct an initial scoping assessment to determine whether construction activities would disturb formations that may contain important paleontological resources. Potential impacts to important paleontological resources should be avoided by moving or rerouting the site of construction or removing or reducing the need for surface disturbance. When avoidance is not possible, a mitigation plan should be prepared to identify physical and administrative protective measures and protocols such as halting work, to be implemented in the event of fossil discoveries. The scoping assessment and mitigation plan should be conducted in accordance with the managing agency's fossil management practices and policies.
PAL-2	2	P	If paleontological resources are known to be present in the project area, or if areas with a high potential to contain paleontological material have been identified, the applicant shall prepare a paleontological resources management and mitigation plan. If adverse impacts to paleontological resources cannot be avoided or mitigated within the designated corridors, the agency may consider alternative development routes to avoid, minimize, or mitigate adverse effects.
PAL-3	3	P	A protocol for unexpected paleontological discoveries should be developed. Unexpected discovery during construction should be brought to the immediate attention of the responsible federal agency's authorized officer. Work should be halted in the vicinity of the discovery to avoid further disturbance of the resource while the resource is being evaluated and appropriate mitigation measures are being developed.
PAL-4	1	C	Project construction activities will follow the protective measures and protocols identified in the paleontological resources mitigation plan.
PAL-5	2	C	All paleontological specimens found on federal lands remain the property of the U.S. government. Specimens, therefore, may only be collected by a qualified paleontologist under a permit issued by the managing agency and must be curated in an approved repository.
Ecological Resources			
ECO-1	1	P	Applicants shall identify important, sensitive, or unique habitats and BLM sensitive, FS sensitive, and state-listed species in the vicinity of proposed projects and, to the extent feasible, design the project to avoid, minimize, or mitigate impacts to these habitats and species.
ECO-2	2	P	To restore disturbed habitats, the applicant will prepare a habitat restoration plan that identifies the approach and methods to be used to restore habitats disturbed during project construction activities. The plan will be designed to expedite the recovery to natural habitats supporting native vegetation, and require restoration to be completed as soon as practicable after completion of construction, minimizing the habitat converted at any one time. To ensure rapid and successful restoration efforts, the plan will include restoration success criteria, including time frames, which will be developed in coordination with the appropriate agency and which must be met by the applicant. Bonding to cover the full cost of restoration will be required.

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PDEIS BMP No.	WWEC IOP No.	Phase(s)[1]	WWEC IOP Description
ECO-3	3	P	In consultation with the U.S. Army Corps of Engineers, the appropriate agency, assisted by the project applicant, will identify wetlands (including ephemeral, intermittent, and isolated wetlands), riparian habitats, streams, and other aquatic habitats in the project area and, to the extent feasible, design the project to avoid, minimize, or mitigate impacts to these habitats.
ECO-4	1	C	Areas that are known to support ESA-listed species, BLM-sensitive, FS-sensitive, and state-listed species or their habitats must be identified and marked with flagging or other appropriate means to avoid direct impacts during construction activities. Construction activities upslope of these areas should be avoided to prevent indirect impacts of surface water and sediment runoff.
ECO-5	2	C	All construction activities that could affect wetlands or waters of the United States must be conducted in accordance with permit requirements identified in permits issued by the U.S. Army Corps of Engineers.
ECO-6	1	O	Applicants shall review existing information regarding plant and animal species and their habitats in the vicinity of the project area and identify potential impacts to the applicable agencies.
ECO-7	2	O	Project staff shall avoid harassment or disturbance of wildlife, especially during reproductive courtship, migratory, and nesting seasons.
ECO-8	3	O	Observations by project staff of potential wildlife problems, including wildlife mortality, will be immediately reported to the applicable agency authorized officer.
Vegetation Management			
VEG-2	1	P	Applicants shall develop an integrated vegetation management plan consistent with applicable regulations and agency policies for the control of unwanted vegetation, noxious weeds, and invasive species (E.O. 13112). The plan should address monitoring; ROW vegetation management; the use of certified weedseed-free hay, straw, and/or mulch mulching; the cleaning of vehicles to avoid the introduction of invasive weeds; education of personnel on weed identification; the manner in which weeds spread; and the methods for treating infestations (BLM 2006a, 2007b,c, 2008c).
Pesticide and Herbicide Use			
VEG-3	1	O	If pesticides are used, the applicant shall ensure that pesticide applications as specified in the integrated vegetation management plan are conducted within the framework of agency policies and entail only the use of EPA registered pesticides that are applied in a manner consistent with label directions and state pesticide regulations. Pesticide use should be limited to non persistent immobile pesticides and may be applied only in accordance with label and application permit directions and stipulations for terrestrial and aquatic applications (BLM 2007b).
VEG-4	2	O	Pesticide and herbicide uses must be avoided in the vicinity of sole source aquifer areas (BLM 2007b).
Cultural Resources			
CULT-1	1	P	Cultural resources management services and individuals providing those services shall meet the Secretary of the Interior's Standards for Archaeology and Historic Preservation.
CULT-2	2	P	The project applicant may, with the approval of the agency POC, assign a Cultural Resource Coordinator to ensure an integrated compliance process across administrated and jurisdictional boundaries. The Cultural Resource Coordinator will facilitate and coordinate compliance with multiple laws, policies, regulations, and existing pertinent agreements (PAs, MOAs, or MOUs) among multiple agencies and other entities, jurisdictions, and federally recognized Tribes. The coordinator may assist with development of pertinent agreements among concerned parties during the course of the project. The coordinator shall be a qualified professional with experience in cultural resource compliance. Where appropriate, the Cultural Resource Coordinator may also serve as the Tribal Coordinator. Alternatively, the agency POC may assign such coordinators, to be paid for through project cost-recovery funds. The agencies, through the POC, remain responsible for consultation.

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PDEIS BMP No.	WWEC IOP No.	Phase(s)[1]	WWEC IOP Description
CULT-3	3	P	The project applicant may, with the approval of the agency POC, assign a Tribal Coordinator to facilitate and coordinate consultation and compliance with multiple laws, agencies, and Tribes in order to ensure effective government-to- government consultation throughout the life of the project. Alternatively, the agency POC may assign such coordinators, to be paid for through project cost-recovery funds. The agencies, through the POC, remain responsible for consultation.
CULT-4	4	P	All historic properties in the Area of Potential Effect (APE) will be identified and evaluated. The APE shall include that area within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties and shall include a reasonable construction buffer zone and laydown areas, access roads, and borrow areas, as well as a reasonable assessment of areas subject to effects from visual, auditory, or atmospheric impacts, or impacts from increased access.
CULT-5	5	P	Project proponents must develop a cultural resources management plan (CRMP) to outline the process for compliance with applicable cultural resource laws during pre-project planning, management of resources during operation, and consideration of the effect of decommissioning. CRMPs should meet the specifications of the appropriate agency and address compliance with all appropriate laws. CRMPs should include the following, as appropriate: identification of the federally recognized Tribes, State Historic Preservation Offices (SHPOs), and consulting parties for the project; identification of long- and short-term management goals for cultural resources within the APE of the project; the definition of the APE; appropriate procedures for inventory, evaluation, and identification of effects to historic properties; evaluation of eligibility for the NRHP for all resources in the APE; description of the measures to avoid, minimize, or mitigate adverse effects to historic properties; procedures for inadvertent discovery; procedures for considering Native American Graves Protection and Repatriation Act (NAGPRA) issues, monitoring needs, and plans to be employed during construction; curation procedures; anticipated personnel requirements and qualifications; public outreach and interpretation plans; and discussion of other concerns. The draft CRMP should be reviewed and approved by the agency POC in consultation with historic preservation partners, including appropriate SHPOs, Tribes, and consulting parties. CRMPs must specify procedures that would be followed for compliance with cultural resource laws, should the project change during the course of implementation.
CULT-6	6	P	Project applicants will provide cultural resources training for project personnel regarding the laws protecting cultural resources, appropriate conduct in the field (such as procedures for the inadvertent discovery of human remains), and other project-specific issues identified in the CRMP. Training plans should be part of the CRMP and should be subject to the approval of the POC. When government-to-government consultation identifies the need and the possibility, Tribes may be invited to participate in or contribute to relevant sessions.
CULT-7	7	P	If adverse effects to historic properties will result from a project, a Historic Property Treatment Plan will be developed in consultation with the SHPO, the appropriate federally recognized Tribes, and any consulting parties. The plan will outline how the impacts to the historic properties would be mitigated, minimized, or avoided. Agency officials will give full consideration to the applicable mitigation measures found in Section 3.10.5.2 of the Final PEIS when consulting during the project preplanning stages to resolve adverse effects on historic properties.
CULT-8	8	P	As directed by the agency POC, project proponents will prepare a public education and outreach component regarding cultural resources such as a public presentation, a news article, a publication, or a display. Public education and outreach components will be subject to Agency approval and Tribal review and consultation when the content or format is of interest to affected Tribes.
CULT-9	9	P	Cultural resources inventory, evaluation, and mitigation practices should incorporate modeling and sampling strategies to the extent practicable, in concurrence with SHPOs and other relevant parties, and as approved by the agency POC.
CULT-10	10	P	Project applicants shall provide all cultural resources reports and data in an electronic format that is approved by the Agency POC and integrated across jurisdictional boundaries, that meets current standards, and that is compatible with SHPO systems. The Agency will submit this data to the SHPO in a timely fashion. Project proponents should submit cultural resources data on a regular basis to ensure that SHPO systems are kept up to date for reference as the different phases of the project proceed. Paper records may also be required by the agency.
CULT-11	11	P	Cultural resources inventory procedures, specified in the CRMP, will include development of historic contexts based on the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716) sufficient to support the evaluation of cultural resources encountered in the APE.

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PDEIS BMP No.	WWEC IOP No.	Phase(s)[1]	WWEC IOP Description
CULT-12	1	C	Project applicants shall provide all cultural resources reports and data in an approved electronic format that is integrated across jurisdictional boundaries, that meets current standards, and that is compatible with SHPO systems. Project proponents shall submit cultural resources data on a regular basis to ensure that SHPO systems are kept up to date for reference as the different phases of the project proceed.
CULT-13	2	C	When an area is identified as having a high potential for cultural resources but none are found during a pre-construction field survey, a professionally qualified cultural resources specialist will be required to monitor ground-disturbing activities during project construction, and to complete a report when the activities are finished. The protocol for monitoring should be identified in the CRMP.
CULT-14	3	C	When human remains, funerary objects, sacred objects, or objects of cultural patrimony are inadvertently discovered, the provisions of NAGPRA shall apply and the process identified in the CRMP must be followed.
Tribal Traditional Cultural Resources			
CULT-15	1	P	The appropriate agency, assisted by the applicant, must comply with all laws, policies, and regulations pertaining to government-to-government consultation with federally recognized Tribes. Agencies shall initiate consultation with affected Tribes at the outset of project planning and shall continue consultation throughout project planning, construction, operation, and decommissioning. Consultation shall include, but not be limited to, the following: (a) identification of potentially affected Tribes; (b) identification of appropriate Tribal contacts and the preferred means of communication with these Tribes; (c) provision to the Tribes of project specific information (e.g., project proponents, maps, design features, proposed ROW routes, construction methods, etc.) at the outset of project planning and throughout the life of the project; (d) identification of issues of concern specific to affected Tribes (e.g., potential impacts to culturally sensitive areas or resources, hazard and safety management plans, treaty reserved rights and trust responsibilities); (e) identification of areas and resources of concern to Tribes; and (e) resolution of concerns (e.g., actions to avoid, minimize, or mitigate impacts to important resources; Memoranda of Agreement stating what actions would be taken to mitigated project effects; or agreements for Tribal participation in monitoring efforts or operator training programs).
CULT-16	2	P	The appropriate agency, assisted by the applicant, must comply with all pertinent laws, policies, and regulations addressing cultural and other resources important to Tribes, including the NHPA, ARPA, NAGPRA, and other laws and regulations as listed in Table 3.11-2 of this EIS.
CULT-17	3	P	The agencies shall recognize the significance to many Tribes of traditional cultural places, such as sacred sites, sacred landscapes, gathering grounds, and burial areas, and shall seek to identify such areas through consultation with affected Tribes early in the project planning process. Agencies shall seek to avoid, minimize, or mitigate impacts to such places in consultation with the Tribes, project proponents, and other relevant parties. Where confidentiality concerning these areas is important to an affected Tribe, agencies shall honor such confidentiality unless the Tribe agrees to release the information.
CULT-18	4	P	A protocol must be developed for inadvertent discovery of Native American human remains and funerary items to comply with the NAGPRA in consultation with appropriate federally recognized Tribes. Unexpected discovery of such items during construction must be brought to the immediate attention of the responsible federal agency's authorized officer. Work must be halted in the vicinity of the find of Native American graves and funerary items to avoid further disturbance to the resources while they are being evaluated and appropriate mitigation measures are being developed. The procedures for reporting items covered under NAGPRA must be identified in the CRMP.
Visual Resources			
VIS-1	1	P	Applicants shall identify and consider visual resource management (VRM) and scenery management (SMS) issues early in the design process to facilitate integration of VRM and scenery treatments into the overall site development program and construction documents. Visual/scenery management considerations, environmental analyses, mitigation planning, and design shall reference and be in accordance with the land management agency visual/scenery management policies and procedures applicable to the jurisdiction the project lies within. Applicants shall coordinate between multiple agencies on visual/scenery sensitive issues when projects transition from one jurisdiction to another, especially when transitions occur within a shared viewshed.

Table C.1-1 Westwide Energy Corridor Final Programmatic EIS Best Management Practices

PDEIS BMP No.	WWEC IOP No.	Phase(s)[1]	WWEC IOP Description
VIS-2	2	P	Applicants shall prepare a VRM or scenery management plan. The applicant's planning team shall include an appropriately trained specialist, such as a landscape architect with demonstrated VRM and/or SMS experience. The VRM/SMS specialist shall coordinate with the BLM/FS on the availability of the appropriate visual or scenic inventory data, VRM management class delineations, Scenic Integrity Objectives (SIOs), and federal agency expectations for preparing project plans and mitigation strategies to comply with RMP or LRMP direction related to scenery and/or visual resources. Applicants shall confirm that a current Visual Resource Inventory and/or Scenic Class inventory is available and that the resource management plan (RMP) or land resource and management plan (LRMP) VRM classifications or SIOs have been designated in the current land management plan. Project plans shall abide by the VRM class designations and SIOs and consider sensitivities defined within the visual or scenic resource Inventory. If visual or scenic management objectives are absent, then the proper inventory and classification process shall be followed to develop them in accordance with the BLM VRM manual and handbooks or FS SMS process, depending on the agency. When the VRM management classes or SIOs are absent, then the project alternatives must reflect a range of management options related to scenery and visual resources that reflect the values identified in the visual/scenic inventory. Responsibility for developing an inventory or VRM management classes (or in the case of the FS, Scenic Classes and SIOs) will remain with the respective agency, but how to accomplish these tasks will be determined by the Field Office Manager or Forest Supervisor, who will consider the applicant's role and financial participation in completing the work.
VIS-3	3	P	Visual and scenic mitigation planning/design and analysis shall be performed through integrated field assessment, applied global positioning system (GPS) technology, field photo documentation, use of computer-aided design and development software, 3-D modeling GIS software, and visual simulation software, as appropriate. Proposed activities, projects, and site development plans shall be analyzed and further developed using these technologies to meet visual and scenic objectives for the project area and surrounding areas sufficient to provide the full context of the viewshed. Visual simulations shall be prepared according to BLM Handbook H-8432-1, or other agency requirements, to create spatially accurate depictions of the appearance of proposed facilities, as reflected in the 3-D design models. Simulations shall depict proposed project appearance from sensitive/scenic locations as well as more typical viewing locations. Transmission towers, roads, compressor stations, valves, and other aboveground infrastructure should be integrated esthetically with the surrounding landscape in order to minimize contrast with the natural environment.
VIS-4	4	P	Applicants shall develop adequate terrain mapping on a landscape/viewshed scale for site planning/design, visual impact analysis, visual impact mitigation planning/design, and for full assessment and mitigation of cumulative visual impacts through applied, state-of the-art design practices using the cited software systems. The landscape/ viewshed scale mapping shall be geo-referenced and at the same Digital Elevation Model (DEM) resolution and contour interval within the margin of error suitable for engineered site design. This level of mapping shall enable proper placement of proposed developments into the digital viewshed context. Final plans shall be field verified for compliance.
VIS-5	5	P	The full range of visual and scenic best management practices shall be considered, and plans shall incorporate all pertinent best management practices (BMPs). Visual and scenic resource monitoring and compliance strategies shall be included as a part of the project mitigation plans.
VIS-6	6	P	Compliance with VRM/SMS objectives shall be determined through the use of the BLM Contrast Rating procedures defined in BLM Handbook H-8431-1 Visual Contrast Rating, or the FS SMS Handbook 701. Mitigation of visual impacts shall abide by the requirements of these handbooks.
VIS-7	1	C	A pre-construction meeting with BLM/FS landscape architects or other designated visual/scenic resource specialist shall be held before construction begins to coordinate on the VRM/SMS mitigation strategy and confirm the compliance-checking schedule and procedures. Applicants shall integrate interim/final reclamation VRM/SMS mitigation elements early in the construction, which may include treatments such as thinning and feathering vegetation along project edges, enhanced contour grading, salvaging landscape materials from within construction areas, special revegetation requirements, etc. Applicants shall coordinate with BLM/FS in advance to have BLM/FS landscape architects or other designated visual/scenic resource specialists onsite during construction to work with implementing BMPs.
VIS-8	1	O	Terms and conditions for VRM/SMS mitigation compliance shall be maintained and monitored for compliance with visual objectives, with adaptive management adjustments and modifications as necessary and approved by the BLM/FS landscape architect or other designated visual/scenic resource specialist.

Table C.1-1 Westwide Energy Corridor Final Programmatic EIS Best Management Practices

PDEIS BMP No.	WWEC IOP No.	Phase(s)[1]	WWEC IOP Description
Public Health and Safety			
PHS-3	1	P	An electricity transmission project shall be planned by the applicant to comply with FAA regulations, including lighting regulations, and to avoid potential safety issues associated with proximity to airports, military bases or training areas, or landing strips.
PHS-4	2	P	A health and safety program shall be developed by the applicant to protect both workers and the general public during construction, operation, and decommissioning of an energy transport project. The program should identify all applicable federal and state occupational safety standards, establish safe work practices for each task (e.g., requirements for personal protective equipment and safety harnesses, Occupational Safety and Health Administration [OSHA] standard practices for safe use of explosives and blasting agents, measures for reducing occupational electromagnetic field [EMF] exposures), and define safety performance standards (e.g., electrical system standards). The program should include a training program to identify hazard training requirements for workers for each task and establish procedures for providing required training to all workers. Documentation of training and a mechanism for reporting serious accidents to appropriate agencies should be established.
PHS-5	3	P	The health and safety program shall establish a safety zone or setback from roads and other public access areas that is sufficient to prevent accidents resulting from various hazards. It should identify requirements for temporary fencing around staging areas, storage yards, and excavations during construction or decommissioning activities. It should also identify measures to be taken during the operations phase to limit public access to those components of energy facilities that present health or safety risks.
PHS-6	4	P	Applicants will develop a comprehensive emergency plan that considers the vulnerabilities of their energy system to all credible events initiated by natural causes (earthquakes, avalanches, floods, high winds, violent storms, etc.), human error, mechanical failure, cyber attack, sabotage, or deliberate destructive acts of both domestic and international origin and the potential for and possible consequences of those events. Vulnerability, threat, and consequence assessment methodologies and criteria in the sector-specific plan (SSP) for energy will be used and appropriate preemptive and mitigative response actions will be identified. The applicant must coordinate emergency planning with state, local, and Tribal emergency and public safety authorities and with owners and operators of other energy systems collocated in the corridor or in adjacent corridors that could also be impacted.
PHS-7	5	P	In addition to directives contained in other IOPs in this chapter, the applicant must identify all federal, state, and local regulations pertaining to environmental protection, worker health and safety, public safety, and system reliability that are applicable throughout the construction, operation, and decommissioning phases of their facility's life cycle and must develop appropriate compliance strategies, including securing all necessary permits and approvals.
Hazardous Materials Management			
PHS-8	1	P	Applicants for petroleum pipelines and projects involving oil-filled electrical devices shall develop a spill prevention and response plan identifying spill prevention measures to be implemented, training requirements, appropriate spill response actions, and procedures for making timely notifications to authorities. The spill prevention and response plan should include identification of any sensitive biotic resources and locations (such as habitats) that require special measures to provide protection, as well as the measures needed to provide that protection.
Hazardous Materials and Wastewater Management			
PHS-9	1	C	Any wastewater generated by the applicant in association with temporary, portable sanitary facilities must be periodically removed on a schedule approved by the agency, by a licensed hauler and introduced into an existing municipal sewage treatment facility. Temporary, portable sanitary facilities provided for construction crews should be adequate to support expected on-site personnel and should be removed at completion of construction activities.
PHS-10	2	C	All hazardous materials (including vehicle and equipment fuels) brought to the project site will be in appropriate containers and will be stored in designated and properly designed storage areas with appropriate secondary containment features. Excess hazardous materials will be removed from the project site after completion of the activities in which they are used.
PHS-11	1	O	The applicant shall provide secondary containment for all on-site hazardous materials and waste storage areas.
PHS-12	2	O	The applicant shall ensure that wastes are properly containerized and removed periodically for disposal at appropriate off-site permitted disposal facilities.

Table C.1-1 Westwide Energy Corridor Final Programmatic EIS Best Management Practices

PDEIS BMP No.	WWEC IOP No.	Phase(s)[1]	WWEC IOP Description
PHS-13	3	O	In the event of an accidental release to the environment, the applicant must initiate spill cleanup procedures and document the event, including a cause analysis; appropriate corrective actions taken; and a characterization of the resulting environmental or health and safety impacts. Documentation of the event should be provided to the land management agency's authorized officer and other federal and state agencies, as required.
Hazardous Materials and Waste Management			
PHS-14	1	D	All fuels, hazardous materials, and other chemicals will be removed from the site and properly disposed of or reused.
PHS-15	2	D	Incidental spills of petroleum products and other chemicals will be removed and the affected area cleaned to meet applicable standards.
PHS-16	3	D	Solid wastes generated during decommissioning will be accumulated, transported, and disposed in permitted off-site facilities in accordance with state and local requirements; no solid wastes will be disposed of within the footprint of the ROW or the corridor.
PHS-17	4	D	Hazardous wastes generated as a result of component cleaning will be containerized and disposed of in permitted facilities.
Fire Management			
FIRE-1	1	P	Applicants shall develop a fire management strategy to implement measures to minimize the potential for a human-caused fire during project construction, operation, and decommissioning. The strategy should consider the need to reduce hazardous fuels (e.g., native and non-native annual grasses and shrubs) and to prevent the spread of fires started outside or inside a corridor, and clarify who has responsibility for fire suppression and hazardous fuels reduction for the corridor.
FIRE-2	2	P	Applicants must work with the local land management agency to identify project areas that may incur heavy fuel buildups, and develop a long-term strategy on vegetation management of these areas. The strategy may include land treatment during project construction, which may extend outside the planned ROW clearing limits.
Fire Safety			
FIRE-3	1	C	The applicant must ensure that all construction equipment used is adequately muffled and maintained and that spark arrestors are used with construction equipment in areas with, and during periods of, high fire danger.
FIRE-4	2	C	Flammable materials (including fuels) will be stored in appropriate containers.
Air Emissions			
AIR-1	1	C	The applicant shall cover construction materials and stockpiled soils if these are sources of fugitive dust.
AIR-2	2	C	To minimize fugitive dust generation, the applicant shall water land before and during surface clearing or excavation activities. Areas where blasting would occur should be covered with mats.
Air Quality			
AIR-3	1	O	Dust abatement techniques (e.g., water spraying) shall be used by the applicant on unpaved, unvegetated surfaces to minimize airborne dust. Water for dust abatement should be obtained and used by the applicant under the appropriate state water use permitting system. Used oil will not be used for dust abatement.
Noise			
NOISE-1	1	C	The applicant shall limit noisy construction activities (including blasting) to the least noise-sensitive times of day (i.e., daytime only between 7 a.m. and 10 p.m.) and weekdays.
NOISE-2	1	O	The applicant shall ensure that all equipment has sound-control devices no less effective than those provided on the original equipment.

Table C.1-1 Westwide Energy Corridor Final Programmatic EIS Best Management Practices

PDEIS BMP No.	WWEC IOP No.	Phase(s)[1]	WWEC IOP Description
Restoration			
REST-1	1	D	Topsoil removed during decommissioning activities shall be salvaged and reapplied during final reclamation; all areas of disturbed soil shall be reclaimed using weed-free native shrubs, grasses, and forbs or other plant species approved by the land management agency; grades will be returned to pre-development contours to the greatest extent feasible.
REST-2	2	D	The vegetation cover, composition, and diversity shall be restored to values commensurate with the ecological setting, as approved by the authorizing officer.

[1] Phase definitions: P-Planning, C-Construction, O-Operation, D-Decommission

Note: This tabulation does not contain the resource-specific potential mitigation measures that are recommended in the WWEC Preliminary Final EIS.

Source: USDOE et al. 2008.

C.2 Applicant Committed Design Features to be Applied to the TWE Transmission Line

Table C.2-1 Applicant Committed Design Features

DEIS No.	Phase(s)[1]	Topic	Design Feature Description
General Design Features			
TWE-1	P	General, compliance with agency stipulations and RODs	The TWE Project will be planned, constructed, operated, and decommissioned in accordance with the agencies' Records of Decision (RODs), the BLM's ROW Grant stipulations, USFS Special Use Permit stipulations, and requirements of other permitting agencies.
TWE-2	P	General, compliance with laws and regulations	The Applicant will comply with all applicable environmental laws and regulations. Applicable laws and regulations may include, but are not limited to, the Clean Water Act (CWA) Section 303(d) and Section 404; the Wild and Scenic Rivers Act, Section 3(a) or 2(a) ii; the Endangered Species Act (ESA), Section 7; the National Historic Preservation Act (NHPA), Section 106; and the Native American Graves Protection and Repatriation Act (NAGPRA). Compliance with all applicable laws and regulations will be documented in the Final Plan of Development (POD)/Construction, Operation, and Maintenance (COM) Plan.
TWE-3	P	General, mitigation monitoring plan	The COM Plan will include a mitigation monitoring plan that will address how each mitigation measure required by permitting agencies in their respective decision documents and permits will be monitored for compliance.
TWE-4	P	General, environmental training	Prior to construction, all personnel will be instructed on the protection of cultural, paleontological, ecological resources, and other natural resources in accordance with the COM Plan provisions. To assist in this effort, the construction contract would address (a) federal, state, and tribal laws regarding cultural resources, fossils, plants, and wildlife, including collection and removal; and (b) the importance of these resources and the purpose and necessity of protecting them.
Project Design, Access, and Construction			
TWE-5	P	General, compliance with laws and regulations	The COM Plan will display the location of Project infrastructure (i.e. towers, access roads, substations) and identify short-term and long-term land and resource impacts and the mitigation measures that will be implemented for site-specific and resource-specific environmental impacts.
TWE-6	P	General, Access Road Plan	The COM Plan will include an Access Road Plan that incorporates relevant agency standards regarding road design, construction, maintenance, and decommissioning. The Access Road Plan will incorporate best management practices, stipulated by the agencies in their respective decision documents and permits.
TWE-7	P	Access, visual	The alignment of any new access roads will follow the designated area's landform contours where practical, providing that such alignment does not additionally impact resource values. This will minimize ground disturbance and reduce scarring (visual contrast).
TWE-8	P, C	Access, tower placements, surface water, vegetation management, drainage, dust control	Crossings of streams and waterways will be done in compliance with federal, state, and local regulations. Roads will be built as near as possible at right angles to the streams and washes (Arizona crossing). Culverts will be installed where necessary. All construction and maintenance activities will be conducted in a manner that will minimize disturbance to vegetation, drainage channels, and intermittent or perennial stream banks. In addition, road construction will include dust-control measures during construction in sensitive areas. All existing roads will be left in a condition equal to, or better than, their condition prior to the construction of the transmission line. Structures will be sited with a minimum distance of 200 feet from streams, wherever possible.
TWE-9	C, O	Access	All construction vehicle movement outside the ROW normally will be restricted to pre-designated access or public roads.
TWE-10	P, C	General ROW, visual	The area limits of construction activities will normally be predetermined, with activity restricted to and confined within those limits. No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate survey or construction activity limits.
TWE-11	P, C	Access, visual	In construction areas where re-contouring is not required, vegetation will be left in place, wherever possible, and original contour will be maintained to avoid excessive root damage and to allow for re-sprouting.

Table C.2-1 Applicant Committed Design Features

DEIS No.	Phase(s)[1]	Topic	Design Feature Description
TWE-12	P, C, O	Access, soils, vegetation, water, cultural visual resources	Except for repairs necessary to make roads passable, no widening or upgrading of existing access roads will be undertaken in the area of construction and operation, where soils or vegetation are sensitive to disturbance. In designated areas, structures will be placed to avoid sensitive features such as, but not limited to, riparian areas, water courses and cultural sites, or to allow conductors to clearly span the features within limits of standard structure design. This will minimize the amount of disturbance to the sensitive feature or reduce visual contrast.
TWE-13	C	Vegetation management, restoration, erosion control	In construction areas (e.g., marshalling yards, structure sites, spur roads from existing access roads) where ground disturbance is significant or where re-contouring is required, surface restoration will occur as required by the landowner or land management agency. The method of restoration will normally consist of returning disturbed areas back to their natural contour, reseeding (if required), installing cross drains for erosion control, placing water bars in the road, and filling ditches.
TWE-14	P, C	General, soils, erosion control, visual	The COM Plan will show the location of borrow sites, from which material will be obtained. Borrow pits will be stripped of topsoil to a depth of approximately six inches. Stripped topsoil will be stockpiled and, upon completion of borrow excavation, spread to a uniform depth of six inches over areas of borrow pits from which removed. Before replacing topsoil, excavated surfaces will be reasonably smooth and uniformly sloped. The sides of borrow pits will be brought to stable slopes with slope intersection shaped to carry the natural contour of adjacent undisturbed terrain into the pit to give a natural appearance. When necessary, borrow pits will be drained by open ditches to prevent accumulation of standing water.
TWE-15	C	Clean-up	The COM Plan will include a Clean-up Work Management Plan, and a Flagging, Fencing, and Signage Plan. Except for permanent survey markers and material that locate proposed facilities, stakes, pins, rebar, spikes, and other material will be removed from the surface and within the top 15 inches of the topsoil as a part of final clean-up. Fences on ROW will be removed where necessary and replaced to the original condition or better when the work is finished. Where existing fences are removed to facilitate the work, temporary fence protection for lands adjacent to the ROW will be provided at all times during the continuation of the Contract. Such temporary fence protection will be adequate to prevent public access to restricted areas. Temporary fencing constructed on the ROW will be removed by the Contractor as part of the clean-up operations prior to final acceptance of the completed work.
TWE-16	C	Site restoration and clean-up, water resources, land use	Watering facilities (tanks, natural springs and/or developed springs, water lines, wells, etc.) will be repaired or replaced, if damaged or destroyed by construction activities, to their pre-disturbed condition as required by the landowner or land management agency.
TWE-17	C	Site restoration and clean-up	Existing vegetation such as landscape plants, gardens, and field crops, which are damaged by the application of the soil-applied herbicide, will be replaced by the Contractor at its expense.
TWE-18	C	Site clean-up	The Applicant will pay fair market value to the land management agency for any merchantable forest products that will be cut during ROW clearing. Merchantable forest products will either be removed or stacked at locations determined by the land management agency.
Geology and Soils			
TWE-19	C	Drainage, soil erosion control	The COM Plan will include an Erosion Control Plan. Grading will be performed to provide adequate drainage around structure sites and sufficient clearance under conductors. Excavated material will be spread around the site from which excavated. Topsoil will be piled separately and replaced after work completion.

Table C.2-1 Applicant Committed Design Features

DEIS No.	Phase(s)[1]	Topic	Design Feature Description
Groundwater, Surface Water and Wetlands			
TWE-20	P	Water quality	As part of the CWA 404 Permit for the TWE Project, the COM Plan will include a Wetlands and Waters of the U.S. Plan, which will incorporate measures to avoid and minimize impacts to wetlands and waters of the U.S. to the extent practical. The COM Plan will include a Storm Water Pollution Prevention Plan. The Applicant will identify all streams in the vicinity of the proposed project sites that are listed as impaired under Section 303(d) of the CWA and develop a management plan to avoid, reduce, and/or minimize adverse impacts to those streams.
TWE-21	P	Water quality	The Applicant will obtain a National Pollutant Discharge Elimination System (NPDES) permit from the Environmental Protection Agency (EPA) prior to construction.
TWE-22	C	Water quality	Runoff from excavated areas, construction materials or wastes (including truck washing and concrete washes), and chemical products such as oil, grease, solvents, fuels, and pesticides will be controlled. Excavated material or other construction material will not be stockpiled or deposited near or on stream banks, lake shorelines, ditches, irrigation canals, or other areas where runoff could impact the environment.
TWE-23	C	Water quality	Washing of concrete trucks or disposal of excess concrete in any ditch, canal, stream, or other surface water will not be permitted. Concrete wastes will be disposed of in accordance with all federal, state and local regulations.
TWE-24	C, O	Surface water, wetlands	Vehicle refueling and servicing activities will be performed in designated construction zones located more than 100 feet from wetlands and streams. Spill prevention and containment measures or practices will be incorporated as needed.
TWE-25	P	Dewatering	A dewatering permit will be obtained from the appropriate agencies if required for construction dewatering activities.
Vegetation and Soils Management			
TWE-26	P, C	Vegetation management and noxious weeds	The COM Plan will include a Vegetation Management Plan and a Noxious Weed Management Plan. The Vegetation Management Plan will address plant removal and selective clearing. The Noxious Weed Management Plan will be developed in accordance with appropriate land management agencies' standards, consistent with applicable regulations and agency permitting stipulations for the control of noxious weeds and invasive species (Executive Order (E.O.) 13112). Included in the Noxious Weed Management Plan will be stipulations regarding construction, restoration, and operation (use of weed-free materials, washing of equipment, etc.).
TWE-27	C	Vegetation management	In construction areas where re-contouring is not required, vegetation will be left in place wherever possible and original contour will be maintained to avoid excessive root damage and allow for re-sprouting.
TWE-28	C	Vegetation management, visual	Clearing will be performed so as to minimize marring and scarring the countryside and preserve the natural beauty to the maximum extent possible. Except for danger trees, no clearing will be performed outside the limits of the ROW.
Ecological Resources			
TWE-29	P, C	Ecological, special status species	The COM Plan will include a Biological Protection Plan, which will identify important, sensitive, or unique habitats and BLM sensitive, USFS sensitive, and state-listed species in the vicinity of the TWE Project. The COM Plan will identify measures to be taken to avoid, minimize, or mitigate impacts to these habitats and species.
TWE-30	P	Ecological, raptors	In applicable areas, the TWE Project will be designed to meet or exceed the raptor safe design standards described in the *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* (Avian Power Line Interaction Committee (APLIC) 2006).
TWE-31	P, C, O	Ecological, special status species	Mitigation measures that will be developed during the consultation period with the BLM and under Section 7 of the ESA will be adhered to, along with mitigation developed in conjunction with state authorities.

Table C.2-1 Applicant Committed Design Features

DEIS No.	Phase(s)[1]	Topic	Design Feature Description
TWE-32	P, C	Ecological, special status species	Seasonal restrictions may be implemented in certain areas to mitigate impacts on wildlife. With the exception of emergency repair situations, ROW construction, restoration, maintenance, and termination activities in designated areas will be modified or discontinued during sensitive periods (e.g., nesting and breeding periods) for candidate, proposed or listed threatened and endangered, or other sensitive animal species, as required by permitting agencies. Potential seasonal restrictions and avoidance buffers for nesting raptors will be identified in the DEIS. The Biological Protection Plan will incorporate the seasonal restrictions and stipulations contained in the federal agency RODs.
TWE-33	P, C	Ecological, special status species and habitats	Prior to the start of construction, the Applicant will provide training to all Contractor and Subcontractor personnel and others involved in construction activities where/if there is a known occurrence of protected species or habitat in the construction area. Sensitive areas will be considered avoidance areas. Prior to any construction activity, avoidance areas will be marked on the ground and maintained through the duration of the Contract. The Applicant will remove markings during or following final inspection of the Project.
TWE-34	C	Ecological, special status species and habitats	If evidence of a protected species not previously identified or known is found in the Project area, the Contractor will immediately notify the appropriate land management agencies and provide the location and nature of the findings.
Cultural Resources – Historic, Archaeological, and Tribal Traditional			
TWE-35	P, C	Cultural resources	In consultation with the appropriate land management agencies and state historic preservation officers (SHPOs), and in accordance with the Programmatic Agreement (PA), a Cultural Resources Treatment Plan will be prepared as part of the COM Plan to address the specific mitigation measures for cultural resources that will be developed and implemented to mitigate any identified adverse effects. These may include Project modifications to avoid adverse impacts, monitoring of construction activities, and data recovery studies.
TWE-36	P, C	Native American cultural resources	The Applicant will comply with all laws, policies, and regulations pertaining to consultations with federally recognized Tribes.
TWE-37	P	General, cultural	Prior to construction, all construction personnel will be instructed on the protection of cultural resources, including the provisions of federal, state, and tribal laws regarding cultural resources, including prohibition of collection and removal; and the importance of these resources and the purpose and necessity of protecting them.
Paleontological Resources			
TWE-38	P, C, O	Paleontology	If paleontological resources are known to be present in the Project area, or if areas with a high potential to contain paleontological material has been identified through the NEPA process and DEIS, the Applicant will prepare a Paleontological Resources Management and Mitigation Plan as part of the COM Plan.
TWE-39	P	Paleontology	Paleontological mitigation may be required in areas of greatest disturbance and areas likely to have significant fossils. Preconstruction surveys of such areas may be conducted as agreed upon by the land-managing and lead federal agency.
Land Use and Visual Resources			
TWE-40	P, C, O	Land Use, agriculture	On agricultural land, the ROW will be aligned, in so far as practical, to reduce the impacts to farm operations and agricultural production.
TWE-41	C	Land Use, agriculture	In cultivated agricultural areas, soils that have been compacted by construction activities will be disked to uncompact soils.
TWE-42	C	Land Use, ranching	In grazing areas, excessive amounts of pine needles left by clearing of trees, will be removed from the ROW and disposed of in a location to prevent harm to grazing domestic animals.

Table C.2-1 Applicant Committed Design Features

DEIS No.	Phase(s)[1]	Topic	Design Feature Description
TWE-43	C	Access, land use, gates	The COM Plan will include a Flagging, Fencing, and Signage Plan. Fences and gates will be repaired or replaced to their original pre-disturbed condition as required by the landowner or the land management agency if they are damaged or destroyed by construction activities. Temporary gates will be installed only with the permission of the landowner or the land management agency, and will be restored to their original pre-disturbed condition following construction. Cattle guards will be installed where new permanent access roads cut through fences, at the request of the land management agency.
TWE-44	P, C, O	Visual	Non-specular conductors and shield/ground wires will be used to reduce potential visual impacts.
TWE-45	P, C, O	Structure design and public safety	Structures and/or shield/ground wire will be marked with high-visibility devices where required by governmental agencies (Federal Aviation Administration (FAA)). Structure heights will be less than 200 feet, where feasible, to minimize the need for aircraft obstruction lighting.
TWE-46	P, C, O	Visual resources	The Applicant will comply with federal permitting agency stipulations regarding visual resources.
Air Quality			
TWE-47	P, C	Air quality, dust control	The COM Plan will include a Dust Control and Air Quality Plan. Requirements of those entities having jurisdiction over air quality matters will be adhered to and dust control measures will be developed. Open burning of construction trash will not be allowed unless permitted by appropriate authorities.
TWE-48	P, C	Air quality, emissions	The Contractor and Subcontractor(s) will be required to have and use air emissions control devices on construction machinery, as required by federal, state or local regulations or ordinances.
Corona Effects			
TWE-49	P, C, O	Corona	Transmission line materials will be designed to minimize corona. The proposed hardware and conductor will limit the audible noise, radio interference, and TV interference due to corona. Tension will be maintained on all insulator assemblies to assure positive contact between insulators, thereby avoiding sparking. Caution will be exercised during construction to avoid scratching or nicking the conductor surface that may provide points for corona to occur.
TWE-50	O	TV, radio interference	The Applicant will respond to complaints of line-generated radio or television interference by investigating the complaints and implementing appropriate mitigation measures. The transmission line will be patrolled on a regular basis so that damaged insulators or other line materials that could cause interference are repaired or replaced.
Public Health and Safety			
TWE-51	P, C, O	Safety standards	The TWE Project will be designed, constructed, and operated to meet or exceed the requirements of the National Electrical Safety Code (NESC), U.S. Department of Labor, Occupational Safety and Health Administration standards, and the Applicant's requirements for safety and protection of landowners and their property.
TWE-52	O	Induced currents	The Applicant will apply necessary mitigation to eliminate problems of induced currents and voltages onto conductive objects sharing ROW, to the mutual satisfaction of the parties involved.
TWE-53	P, C	Blasting	The COM Plan will include a Blasting Plan, which will identify methods and mitigation measures to minimize the effects of blasting, where applicable. The Blasting Plan will document the proposed methods to achieve the desired excavations, proposed methods for blasting warning, use of non-electrical blasting systems, and provisions for controlling fly rock, vibrations, and air blast damage.
TWE-54	P, C, O	Noise, electrostatic, and EMF	Research studies performed to determine the effects of audible noise and electrostatic and electromagnetic fields (EMF) will be regularly monitored by the Applicant to ascertain whether these effects are significant.
TWE-55	P, C, O	FAA regulations	The TWE Project will be designed to comply with FAA regulations, including lighting regulations, to avoid potential safety issues associated with proximity to airports, military bases or training areas, or landing strips.

Table C.2-1 Applicant Committed Design Features

DEIS No.	Phase(s)[1]	Topic	Design Feature Description
TWE-56	P	Worker health and safety	As part of the COM Plan, the Applicant will provide a Health and Safety Plan, which will outline measures to protect workers and the general public during construction, operation, and decommissioning of the TWE Project. The Plan will identify applicable federal and state occupational safety standards, establish safe work practices, and define safety performance standards.
Hazardous Materials, Waste, and Wastewater Management			
TWE-57	P	Hazardous materials	As part of the COM Plan, the Applicant will provide a Spill Prevention Notification and Clean-up Plan. The Plan will address compliance with all applicable federal, state, and local regulations, and will include: spill prevention measures, notification procedures in the event of a spill, employee awareness training, and commitment of manpower, equipment, and materials to respond to spills, if they occur.
TWE-58	P	Hazardous materials	As part of the COM Plan, the Applicant will provide a Pesticide Use Plan. The Plan will address compliance with all applicable federal, state and local regulations.
TWE-59	P	Hazardous materials	As part of the COM Plan, the Applicant will provide a Clean-up Work Management Plan that has been approved by applicable federal, state or local environmental regulatory agencies. The plan will address on-site excavation of contaminated soils and debris and will include: identification of contaminants, methods of excavation, personnel training, safety and health procedures, sampling requirements, management of excavated soils and debris, and disposal methods.
TWE-60	C	Waste management	No non-biodegradable debris will be deposited in the ROW. Slash and other biodegradable debris will be left in place or disposed of in accordance with agency requirements.
TWE-61	C, O	Hazardous materials, waste management	As part of the COM Plan, the Applicant will provide a Hazardous Materials Management Plan. Hazardous materials will not be drained onto the ground or drainage areas. Totally enclosed containment will be provided for all trash. All construction waste including trash and litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials will be removed to a disposal facility authorized to accept such materials.
TWE-62	C, O	Hazardous materials	If a reportable release of hazardous substance occurs at the work site, the Contractor will immediately notify the Applicant and all environmental agencies, as required by law. The Contractor will be responsible for the clean-up.
Fire Protection			
TWE-64	P, C	Fire, safety	The COM Plan will include a Fire Protection Plan. The Applicant or its Contractor(s) will notify the BLM of any fires and comply with all rules and regulations administered by the BLM and USFS concerning the use, prevention, and suppression of fires on federal lands, including any fire prevention orders that may be in effect at the time of the permitted activity. The Applicant or its Contractor(s) may be held liable for the cost of fire suppression, stabilization, and rehabilitation. In the event of a fire, personal safety will be the first priority of the Applicant or its Contractor(s). The Applicant or its Contractor(s) will: Operate all internal and external combustion engines on federally-managed lands per 36 CFR 261.52(j), which requires all such engines to be equipped with a qualified spark arrester that is maintained and not modified; Carry shovels, water, and fire extinguishers that are rated at a minimum as ABC-10 pound on all equipment and vehicles. If a fire spreads beyond the suppression capability of workers with these tools, all workers will cease fire suppression action and leave the area immediately via pre-identified escape routes; Initiate fire suppression actions in the work area to prevent fire spread to or on federally-administered lands. If fire ignitions cannot be prevented or contained immediately, or it may be foreseeable that a fire would exceed the immediate capability of workers, the operation must be modified or discontinued. No risk of ignition or re-ignition will exist upon leaving the operation area; Notify the appropriate fire center immediately of the location and status of any escaped fire;

Table C.2-1 Applicant Committed Design Features

DEIS No.	Phase(s)[1]	Topic	Design Feature Description
TWE-64 (Cont)			Review weather forecasts and the potential fire danger prior to any operation involving potential sources of fire ignition from vehicles, equipment, or other means. Prevention measures to be taken each workday will be included in the specific job briefing. Consideration will be given to additional mitigation measures or temporary discontinuance of the operation during periods of extreme wind and dryness; Operate all vehicles on designated roads, and park in areas free of vegetation; Operate welding, grinding, or cutting activities in areas cleared of vegetation within range of the sparks for that particular action. A spotter will be required to watch for ignitions; and Use only diesel-powered vehicles in areas where excessive heat from vehicle exhaust systems could start brush or grass fires.

[1]Phase definitions: P-Planning, C-Construction, O-Operation, D-Decommission

C.3 State and BLM Land Use Stipulations Applicable to Transmission Line ROWs

C.3.1 State Stipulation References

The following section details the stipulations references to the State NSU, CSU, and TL stipulations applicable to proposed transmission line corridor.

C.3.1.1 State of Wyoming

Reference: Wyoming Executive Order 2012-019.

Table C.3-1 State of Wyoming No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Wildlife-SSS	Sage grouse	Sage-grouse leks inside core/connectivity areas	Surface occupancy and/or disruptive activities are prohibited on or within a six tenths (0.6) mile radius of the perimeter 1 of occupied sage-grouse leks. Other actions *may* be consistent with the State's strategy when authorized (e.g., buried power and flowlines) with adherence to seasonal restrictions in nesting/early brood-rearing habitat and/or winter concentration areas, where the action(s) would not result in adverse impacts to core sage-grouse populations.	NSU	0.6 mile
Wildlife-SSS	Sage grouse	Sage-grouse outside core/connectivity areas	Surface occupancy and/or disruptive activities are prohibited on or within a one-quarter (0.25) mile radius of the perimeter of occupied sage-grouse leks. Other actions *may* be consistent with the State's strategy when authorized (e.g., buried power and flowlines) with adherence to seasonal restrictions in nesting/early brood-rearing habitat and/or winter concentration areas, where the action(s) would not result in adverse impacts to core sage-grouse populations.	CSU	0.25 mile

Table C.3-2 State of Wyoming Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-SSS	Sage grouse	Sage-grouse nesting/early brood-rearing habitat in core areas	Surface disturbing and/or disruptive activities are prohibited from March 15–June 30 to protect sage-grouse nesting and early brood rearing habitat. Apply this restriction to all nesting and early brood-rearing habitats inside core areas regardless of distance from the lek. Where credible data support different timeframes for this seasonal restriction, dates may be expanded by up to 14 days prior to or subsequent to the above dates.	TL	3/15 to 6/30	None
Wildlife-SSS	Sage grouse	Sage-grouse nesting/early brood-rearing habitat in connectivity areas	Surface disturbing and/or disruptive activities are prohibited from March 15–June 30 to protect nesting and early brood-rearing habitats within 4 miles of the lek or lek perimeter of any occupied sage-grouse lek within identified connectivity areas. Where credible data support different timeframes for this seasonal restriction, dates may be expanded by 14 days prior or subsequent to the above dates.	TL	3/15 to 6/30	4 miles

Table C.3-2 State of Wyoming Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-SSS	Sage grouse	Sage-grouse nesting/early brood-rearing habitat outside core or connectivity areas	Surface disturbing and/or disruptive activities are prohibited from March 15–June 30 to protect sage-grouse nesting and early brood rearing habitats within 2 miles of the lek or lek perimeter of any occupied lek located outside core or connectivity areas. Where credible data support different timeframes for this restriction, dates may be expanded by 14 days prior or subsequent to the above dates.	TL	3/15 to 6/30	2 miles
Wildlife-SSS	Sage grouse	Sage-grouse late brood-rearing and Winter Concentration Areas (WCAs):	Surface disturbing and/or disruptive activities in sage-grouse WCAs are prohibited from December 1–March 14 to protect core populations of sage-grouse that use these winter concentration habitats. While the bulk of winter and late brood rearing habitat necessary to support core area populations is available within core population areas, it may be necessary to protect additional areas of winter concentration that are not located within the current core area boundaries. Appropriate seasonal timing restrictions and habitat protection measures must be considered and evaluated where WCAs or important late brood-rearing areas are identified as supporting populations of Greater Sage-Grouse that attend leks within core.	TL	12/1 to 3/14	No buffer

C.3.1.2 State of Utah

Table C.3-3 State of Utah Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-SSS	California condor	Roosts	Temporary activities within 0.5 miles of established roosting sites or areas will not occur during the season of use, August 1 to November 31, unless the area has been surveyed according to protocol and determined to be unoccupied.	TL	August 1 to November 31	0.5 mile
Wildlife-SSS	California condor	Roosts	No permanent infrastructure will be placed within 0.5 miles of established roosting sites or areas.	NSO		0.5 mile
Wildlife-SSS	California condor	Nests	Temporary activities within 1.0 mile of nest sites will not occur during the breeding season.	TL	January 1 to August 31	1 mile
Wildlife-SSS	Bald eagle	Roosts	Temporary activities within 0.5 miles of winter roost areas, e.g., cottonwood galleries, will not occur during the winter roost season of November 1 to March 31, unless the area has been surveyed according to protocol and determined to be unoccupied.	TL	November 1 to Mach 31	0.5 mile
Wildlife-SSS	Bald eagle	Nests	Temporary activities within 1.0 mile of nest sites will not occur during the breeding season of January 1 to August 31, unless the area has been surveyed according to protocol and determined to be unoccupied.	TL	January 1 to August 31	1 mile

C.3.1.3 State of Colorado

None.

C.3.1.4 State of Nevada

None.

C.3.2 BLM Field Office Stipulation References

The following section details the stipulations and references to the BLM Field Office NSU, CSU, and TL stipulations applicable to the proposed transmission line corridor.

C.3.2.1 Rawlins Field Office, Wyoming

References: Record of Decision and Approved Rawlins Resource Management Plan for Public Lands Administered by the Bureau of Land Management Rawlins Field Office, December 2008. (Chapter 2, Management Decision by Resource; Appendix 1—Wyoming Bureau of Land Management Mitigation Guidelines for Surface Disturbing and Disruptive Activities; Appendix 9—Exception, Modification, and Waiver Criteria; Appendix 13—Reducing Nonpoint Source Pollution with Best Management Practices; Appendix 14—Programmatic Biological Opinion For The Wyoming Bureau of Land Management's Rawlins Resource Management Plan; Appendix 15—Best Management Practices for Reducing Surface Disturbance and Disruptive Activities; and Appendix 34—Designated Right-of-Way Corridor Criteria.

Table C.3-4 Rawlins Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Cultural Resources		Historic trails	Surface disturbance and disruptive activities will be prohibited within either one-quarter mile or the visual horizon (whichever is closer) of historic trails.	NSU	0.25 mile
Cultural Resources		NRHP-eligible sites	Surface disturbing activities will not be allowed within one-quarter mile of a cultural property or the visual horizon, whichever is closer, if the setting contributes to NRHP eligibility.	NSU	0.25 mile
Lands and Realty		Transmission line corridor	CIG/Entrega/WIC Transmission line corridor-Buried utilities only. 1, 320' width.	CSU	No buffer
Soils		Erodible, fragile soils and unstable soils	Surface disturbing activities will be avoided on unstable areas, such as landslides, slumps, and areas exhibiting soil creep. Reclamation practices and BMPs will be applied as appropriate for surface disturbing activities (Appendix 13).	CSU	No buffer
Soils		Slopes > 25%	Surface disturbance will be prohibited in slopes in excess of 25 percent.	NSU	No buffer
Visual		VRM Class I and II areas	Surface disturbance will be prohibited within important scenic areas (Class I and II Visual Resource Management Areas).	NSU	No buffer
Water Resources		100-year floodplains	Surface disturbing activities will be avoided in identified 100-year floodplains	CSU	No buffer

Table C.3-4 Rawlins Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Water Resources		All surface water	Surface disturbance will be prohibited within 500 feet of surface water. Stream crossings for roads and pipelines will be constructed during the period of lowest flow (i.e., late summer or fall) and perpendicular to flow. No surface water or shallow ground waters in connection with surface waters will be utilized for proposed projects. Proper erosion control techniques, such as water bars, netting, rip-rap, etc.	NSU	500 feet
Water Resources		Ephemeral drainages	Surface disturbing activities will be avoided within 100 feet from the inner gorge of ephemeral channels.	CSU	100 feet
Wildlife-Raptors	Bald eagle	Roosts	No ground disturbing activities will be permitted within 0.5 miles of active bald eagle communal winter roost sites year-round. This buffer zone restriction may be adjusted based on site-specific information through coordination with (including written concurrence) the Service, Wyoming Field Office.	NSU	0.5 mile
Wildlife-Raptors	Ferruginous hawk	Nests	Year round, well locations, roads, ancillary facilities, and other surface structures requiring a repeated human presence will not be allowed within 1,200 feet of active ferruginous hawks nests. Distance may vary depending on factors such as nest activity, natural topographic barriers, and line-of-sight distances.	NSU, CSU	1,200 feet
Wildlife-Raptors	Bald eagle	Nests	Surface disturbing and disruptive activities potentially disruptive to nesting raptors are prohibited within a 1-mile buffer (no seasonal buffer).	NSU	1 mile
Wildlife-SSS	Black-footed ferret	White-tailed prairie dog towns/ complexes >200 acres in size	All white-tailed prairie dog towns/complexes greater than 200 acres in size will be avoided. If avoidance is not possible, these areas will be assessed and mapped at the proposed project level. Associated burrow densities of potentially affected towns will be determined, and, when habitat is present, a black-footed ferret survey will be conducted pursuant to the Service and Bureau-approved techniques. If prairie dog towns/complexes suitable as black-footed ferret habitat are present, attempts will be made to avoid locating surface disturbing activities within 164 feet (50 meters) of a town. If a black-footed ferret non-block cleared town/complex cannot be avoided, then a black-footed ferret survey is required (Appendix 14). (Continental Divide non-block cleared complex criterion: > 1,000 acre in size, 27 burrows/ acre, and towns within .09 miles of each other).	CSU	164 feet
Wildlife-SSS	Western boreal toad	Known habitat	Any action that would result in stream channel instability, erosion, and sedimentation within known Western boreal toad habitat will be avoided.	CSU	No buffer
Recreation		Recreation sites, developed and undeveloped	Lands within one-quarter mile of developed and undeveloped recreation sites (17,590 acres) are closed to locatable mineral entry, mineral material disposals, and operation of the public land laws, including sale (Map 3-7). Withdrawals will be pursued. Buried utilities will be allowed with adequate reclamation of the surface. Above-ground facilities will be avoided unless adequately mitigated to protect the recreation site viewshed.	CSU	0.25 mile
Recreation – SRMAs	NA	Upper Platte SRMA	Surface disturbing activities on public lands within one-quarter mile on either side of the river will be intensively managed to maintain the quality of the visual resource OHV use is limited to designated roads or vehicle routes. Open to oil and gas leasing with an NSO stipulation. Existing oil and gas leases will be intensively managed. Surface disturbing and disruptive activities will be restricted to maintain the quality of the visual resource.	CSU	0.25 mile

Table C.3-4 Rawlins Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Special Designations-Wildlife Habitat Management Area		Red Rim-Daley Wildlife Habitat Management Area	Surface disturbing and disruptive activities will be intensively managed to prevent loss of significant habitat. Management will be applied on a case-by-case basis. Developments, uses, and facilities will be managed to avoid damage to vegetation and wildlife habitat. Off-road motor vehicle use for "necessary tasks" (as defined in the Glossary) is allowed. OHV use is limited to designated roads and vehicle routes and closed to over-the-snow vehicles.	CSU	No buffer
Special Designations-Wildlife Habitat Management Area		Upper Muddy Creek Watershed/Grizzly WHMA	Upper Muddy Creek Watershed/Grizzly WHMA is a ROW avoidance area. Surface disturbing and disruptive activities will be intensively managed to prevent loss of significant habitat. Surface disturbing activities will avoid identified 100-year floodplains, 500 feet from perennial surface water and/or wetland and riparian areas, and 100 feet from ephemeral channels. Exceptions to this would be granted by the BLM based on an environmental analysis and site-specific engineering and mitigation plans. Only those actions within areas that cannot be avoided and that provide protection for the aquatic resources in the Muddy Upper Muddy Creek Watershed/Grizzly WHMA will be approved. Surface disturbing and disruptive activities in aspen communities will be avoided.	CSU	No buffer
Vegetation-SSS	Blowout penstemon	Known blowout penstemon habitat	All proposed rights-of-way projects (powerlines, pipelines, roads, etc.) will be designed and locations selected at least 0.25 mile from any known blowout penstemon habitat to minimize disturbances. If the avoidance of adverse affects is not possible, the Bureau will re-initiate consultation with the Service.	CUS	0.25 mile
Vegetation-SSS	Colorado butterfly plant	Known Colorado butterfly plant habitat	All proposed rights-of-way projects (powerlines, pipelines, roads, etc.) will be designed and locations selected at least 0.25 miles from any known Colorado butterfly plant habitat to minimize disturbances. If the avoidance of adverse effects is not possible, the Bureau will re-initiate consultation with the Service. All proposed projects will be designed and locations selected to minimize disturbances to known Colorado butterfly plant populations, and if the avoidance of adverse effects is not possible, the Bureau will re-initiate consultation with the Service.	CSU	0.25 mile
Vegetation-SSS	Ute ladies'-tresses	0.25 miles from any known orchid habitat	All proposed rights-of-way projects (powerlines, pipelines, roads, etc.) will be designed and locations selected at least 0.25 miles from any known orchid habitat to minimize disturbances. If avoidance of adverse effects is not possible, the Bureau will re-initiate consultation with the Service.	CSU	0.25 mile

Table C.3-4 Rawlins Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Wildlife-Raptors	Bald eagle	Nests	Well locations, roads, and ancillary facilities, and other surface structures requiring a repeated human presence, will not be allowed within 1/2 mile of active bald eagle nests. The distance may vary depending on factors such as nest activity, nest topographic barriers, and line-of-sight distance. Surface disturbing and other identified activities, as well as habitat alterations, that may disturb bald eagles will be restricted within suitable habitats that occur within the following bald eagle buffer zones: Zone 1: This area is intended to protect active and alternative nests located within ½ mile of the proposed surface disturbing activity. Between February 1 and August 15, minimal human activity levels will be allowed during the period of first occupancy to two weeks after fledging in this area. Zone 2: This area is intended to protect bald eagle primary use areas located within ½-1 mile of the proposed surface disturbing activity. Light human activity levels will be allowed in this area. Zone 3: This area is designated to protect foraging/concentration areas year-round and would include one of two larger areas, depending on habitat types: a) 2.5 miles extending in all directions from the nest or b) ½ mile from the stream-bank of all streams within 2.5 miles of the nest. Site-specific habitat types and foraging areas will be evaluated to determine which Zone 3 buffer applies. Zone delineation depends on habitat types. No ground disturbing activities will be permitted within 1 mile of active roost sites year round. Other activities that may disturb bald eagles within 1 mile of known communal winter roosts will be restricted during the period of November 1 through April 1.	CSU	825 feet
Wildlife-Raptors	Raptors, all	Nests	Year-round, well locations, roads, ancillary facilities, and other surface structures requiring a repeated human presence will not be allowed within 825 feet of active raptor nests (ferruginous hawks, 1,200 feet). Distance may vary depending on factors such as nest activity, species, natural topographic barriers, and line-of-sight distances.	CSU	825 feet
Wildlife-SSS	Sage grouse	Leks	High-profile structures (overhead power lines) will be authorized on a case by-case basis from one-quarter mile to 1 mile of an occupied greater sage-grouse and sharp-tailed grouse lek.	CSU	0.25 mile to 1 mile
Wildlife-SSS	Sage grouse	Leks	“Controlled surface use” stipulation will be applied to a one-half mile radius of active sage-grouse strutting grounds, including no aboveground facilities (power lines. storage tanks, fences, etc.).	CSU	0.5 mile

Table C.3-5 Rawlins Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Game Birds	All unspecified	Winter concentration areas	To protect important game bird winter concentration areas, activities or surface use will not be allowed from November 15 to April 30 within certain areas encompassed by the authorization.	TL	11/15 to 4/30	No buffer
Wildlife-Raptors	All unspecified	Nests	Seasonal buffer of February 1–July 15.	TL	2/1 to 7/15	0.5 to 1.0 mile

Table C.3-5 Rawlins Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Raptors	All unspecified	Nests	To protect important raptor nesting habitat, activities or surface use will not be allowed from February 1 to July 31. Areas encompassed by the authorization (½ or 1 mile of raptor nests) may be shortened, depending on nesting chronology of individual species, nest site location, and topography).	TL	2/1 to 7/31	0.5 to 1 mile
Wildlife-Raptors	All unspecified	Winter concentration areas	Activities or surface use will not be allowed from November 15 to April 30.	TL	11/15 to 4/30	No buffer
Wildlife-Raptors	Barn owl	Nests	Seasonal buffer of February 1–July 15.	TL	2/1 to 7/15	0.75 mile
Wildlife-Raptors	Burrowing owl	Nests	Seasonal buffer April 15–September 15.	TL	4/15 to 9/15	0.75 mile
Wildlife-Raptors	Cooper's hawk	Nests	Seasonal nest buffer of April 1–July 31.	TL	4/1 to 7/31	0.75 mile
Wildlife-Raptors	Ferruginous hawk	Nests	Seasonal buffer of March 1–July 31.	TL	3/1 to 7/31	1.0 mile
Wildlife-Raptors	Golden eagle	Nests	Seasonal buffer of February 1–July 15.	TL	2/1 to 7/15	1.0 mile
Wildlife-Raptors	Great horned owl	Nests	Seasonal buffer of February 1–July 15.	TL	2/1 to 7/15	0.75 mile
Wildlife-Raptors	Kestrel	Nests	Seasonal nest buffer of April 1–July 31.	TL	4/1 to 7/31	0.75 mile
Wildlife-Raptors	Long-eared owl	Nests	Seasonal buffer of March 1–July 31.	TL	3/1 to 7/31	0.75 mile
Wildlife-Raptors	Merlin	Nests	Seasonal nest buffer of April 1–July 31.	TL	4/1 to 7/31	0.75 mile
Wildlife-Raptors	Northern goshawk	Nests	Seasonal nest buffer of April 1–August 31.	TL	4/1 to 8/31	0.75 mile
Wildlife-Raptors	Northern harrier	Nests	Seasonal nest buffer of April 1–July 31.	TL	4/1 to 7/31	0.75 mile
Wildlife-Raptors	Osprey	Nests	Seasonal nest buffer of April 1–July 31.	TL	4/1 to 7/31	0.75 mile
Wildlife-Raptors	Peregrine falcon	Nests	Seasonal buffer of March 1–July 31.	TL	3/1 to 7/31	0.75 mile
Wildlife-Raptors	Prairie falcon	Nests	Seasonal nest buffer of April 1–July 31.	TL	4/1 to 7/31	0.75 mile
Wildlife-Raptors	Red-tailed hawk	Nests	Seasonal buffer of February 1–July 15.	TL	2/1 to 7/15	0.75 mile
Wildlife-Raptors	Screech owl	Nests	Seasonal buffer of March 1–July 31.	TL	3/1 to 7/31	0.75 mile
Wildlife-Raptors	Sharp-shinned hawk	Nests	Seasonal nest buffer of April 1–July 31.	TL	4/1 to 7/31	0.75 mile
Wildlife-Raptors	Short-eared owl	Nests	Seasonal buffer of March 1–July 31.	TL	3/1 to 7/31	0.75 mile

Table C.3-5 Rawlins Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Raptors	Swainson's hawk	Nests	Seasonal nest buffer of April 1–July 31.	TL	4/1 to 7/31	0.75 mile
Wildlife-Raptors	Swainson's hawk	Nests	Seasonal nest buffer of April 1–July 31.	TL	4/1 to 7/31	0.75 mile
Wildlife-SSS	Sage grouse	Leks, nesting and early brood rearing habitat	Nesting/early brood-rearing habitat: Avoid surface disturbing and disruptive activities, geophysical surveys, and organized recreational activities (events) that require a special use permit in suitable greater sage-grouse and sharp-tailed grouse nesting and early brood rearing habitat within 2 miles of the perimeter of an occupied greater sage-grouse lek, and within 1 mile of the perimeter of a sharp-tailed grouse lek, or in identified greater sage-grouse and sharp-tailed grouse nesting and early brood rearing habitat, from March 1 to July 15. Avoidance of surface disturbance or other disruptive activity from March 1 through July 15 within 2 miles from an "active" lek or in suitable greater sage-grouse nesting and early brood rearing habitat.	TL	3/1 to 7/15	1 mile sharp-tailed, 2 miles greater sage grouse
Wildlife-SSS	Sage grouse	Nesting habitat	To protect important sage and sharp-tailed grouse nesting habitat, activities or surface use will not be allowed from February 1 to July 31 within certain areas encompassed by the authorization.	TL	2/1 to 7/31	None specified
Wildlife-SSS	Sage grouse	Winter concentration areas	Surface disturbing and disruptive activities potentially disruptive to delineated greater sage-grouse and sharp-tailed grouse winter concentration areas are prohibited during the period of November 15 to March 14 for the protection of greater sage-grouse and sharp-tailed grouse winter concentration areas.	TL	11/5 to 3/14	No buffer
Wildlife-SSS	Yellow-billed cuckoo	Identified habitat	Surface disturbing or other disruptive activities will be prohibited within 1/2-mile of identified habitat during the period April 15 to August 15 for the protection of nesting Western yellow-billed cuckoos.	TL	4/15 to 8/15	0.5 mile

C.3.2.2 Rock Springs Field Office, Wyoming

References: Green River Resource Area Record of Decision and Green River Resource Management Plan, Rock Springs District Office, October 1997. (Management Decision by Resource; Appendix 2—Wyoming Bureau of Land Management Mitigation Guidelines for Surface Disturbing and Disruptive Activities; Appendix 5-1— Standard Practices, Best Management Practices, and Guidelines for Surface Disturbing Activities; Appendix 7—Procedures for Processing Applications in Areas of Seasonal Restriction; Appendix 10-1— Biological Assessment; Appendix 13—BMPs for nonpoint source pollution; water and wildlife stipulations).

Table C.3-6 Rock Springs Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/
Cultural Resources		Native American burial sites	Known Native American Burial Sites are ROW Exclusion Areas.	NSU	no buffer
Cultural Resources		Historic trails	Surface disturbance and disruptive activities will be prohibited within either one-quarter mile or the visual horizon (whichever is closer) of historic trails.	NSU	0.25 mile
Land Use		ROW avoidance area	An avoidance area for major utility lines will be located along 1-80 between Point of Rocks and Green River. Due to topography, congestion in the concentration area, and surface mining, this area will be restricted to local distribution service lines, All other utilities will be located, if possible, in the northern or southern east-west windows.	CSU	No buffer
Recreation		Pine Mountain RA	The Pine Mountain area will be managed as an avoidance area for rights-of-way and surface disturbing activities.	CSU	No buffer
Special Designations-ACEC		Greater Red Creek ACEC - original Red Creek ACEC	Greater Red Creek ACEC - original Red Creek ACEC portion is an Exclusion Area and VRM II. Note: The one pipeline right-of-way concentration area in the watershed is an avoidance area for any additional rights of-way. However, that part of the right-of-way concentration area, from the Red Creek escarpment south to Richards Gap, is closed to any new rights-of-way development for at least 10 years to allow soils to stabilize from previous disturbance. At the end of the 10-year period, new rights-of-way in the area could be reconsidered if satisfactory stabilization has occurred. The remainder of the BLM-administered public lands that lie east of the right-of-way concentration area will also be managed as an exclusion area for rights-of-way (see Table 2, Map 7. and Map 8).	NSU	No buffer
Special Designations-Wilderness Areas		Red Creek Wilderness	Red Creek Wilderness identified as an Exclusion Area.	NSU	No buffer
Vegetation-SSS	All	SSS known habitat	Special status plant populations are closed to activities that could adversely affect these species and their habitat. Management requirements in habitat areas may include prohibiting or limiting motorized vehicle use, surface uses, and explosive charges or any other surface disturbing or disruptive activity that may cause adverse effects to the plants.	CSU	No buffer
Wild Horses		Wild horse viewing areas	Suitable wild horse herd viewing area(s) may be developed to enhance public viewing of horses. Viewing areas plus a 1/2 mile distance surrounding them will be closed to long-term or permanent intrusions and surface disturbing activities that could interfere with opportunities to view horses (e.g., structures, mineral activities, powerlines, roads. etc.) (Table 7 and Table 2). Short- term intrusions that will blend with the landscape or will benefit the intent of the wild horse herd viewing areas will be considered on a case-by-case basis.	NSU	0.5 mile
Wildlife-Raptors	Raptors, all	Nests	Project components, such as permanent and high profile structures, i.e., buildings, storage tanks, powerlines, roads, well pads, etc. are prohibited within an appropriate distance of active raptor nests. The appropriate distance (usually less than 1/2 mile) will be determined on a case by- case basis and may vary depending upon the species involved, natural topographic barriers, and line-of-sight distances, etc. Placement of facilities, "on" (very low profile) or below ground, and temporary disruptive activities, such as occur with pipeline construction, seismic activity, etc., could be granted exceptions within 1/2 mile of active raptor nests, in certain circumstances (Appendix 7).	NSU	0.5 mile

Table C.3-6 Rock Springs Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/
Wildlife-SSS	Sage grouse	Leks	Aboveground facilities (power lines, storage tanks fences, etc.) are prohibited on or within 1/4 mile of grouse breeding grounds (leks). Placement of facilities, "on" (very low profile) or below ground, and temporary disruptive activities, such as occur with pipeline construction, seismic activity, etc., could be granted exceptions within 1/4 mile of leks, in certain circumstances. Identified ROW avoidance areas in Table 2.	CSU	0.25 mile
Visual		VRM Class I and II areas within Rock Springs FO	Surface disturbance will be prohibited within important scenic areas (Class I and II Visual Resource Management Areas).	NSU	No buffer
Soils		Slopes > 25%	Surface disturbance will be prohibited in slopes in excess of 25 percent.	NSU	No buffer
Soils		Erodible, fragile soils	Areas where the soils are highly erodible or difficult to reclaim will receive increased attention, and are avoidance areas for surface disturbing activities. Surface disturbing activities could be allowed in these areas if site specific analysis determines that soil degradation will not occur and that water quality will not be adversely affected. When applicable, an erosion control plan will be prepared as part of the site specific analysis process for activity and implementation planning. Rehabilitation plans will be developed and implemented for disturbed areas, as needed. If avoidance is impracticable then a plan of operation that addressed erosion control and mitigation will be required. Reclamation practices and BMPs will be applied as appropriate for surface disturbing activities.	CSU	No buffer
Water Resources		100-year floodplains	All surface disturbance, permanent facilities, etc., shall remain a minimum of 500 feet away from the edge of 100-year floodplains unless it is determined through site specific analysis and the Area Manager approves in writing, that there is no practicable alternative to the proposed action. If such a circumstance exists, then all practicable measures to mitigate possible harm to these areas must be employed. These mitigating measures would be determined case by case and may include, but are not limited to, diking, lining, screening, mulching, terracing, and diversions. Therefore, floodplains should have no permanent structures constructed within their boundaries unless it can be demonstrated on a case-by-case basis that there is no physically practical alternative. In cases where floodplain construction is approved, additional constraints could be applied. The 100-year floodplains are closed to any new permanent facilities (e.g., storage tanks, structure pits, etc.). Proposals for linear crossings in these areas will be considered on a case-by-case basis (Table 7). Surface disturbing and construction activities (e.g., mineral exploration and development activities, pipelines, powerlines, roads, recreation sites, fences, wells, etc.) that could adversely affect water quality and wetland and riparian habitat will avoid the area within 500 feet of or on 100-year floodplains. Proposals for linear crossings in these areas will be considered on a case-by-case basis. Activities could be allowed if a site specific analysis determines that no adverse impacts will occur to floodplains or water quality, and a plan to mitigate impacts to water quality is approved (Map 25 and Table 7).	NSU, CSU	500 feet

Table C.3-6 Rock Springs Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/
Water Resources		All surface water	Surface disturbance will be prohibited within 500 feet of surface water unless it is determined through site specific analysis and the Area Manager approves in writing, that there is no practicable alternative to the proposed action. If such a circumstance exists, then all practicable measures to mitigate possible harm to these areas must be employed. These mitigating measures would be determined case by case and may include, but are not limited to, diking, lining, screening, mulching, terracing, and diversions. Activities could be allowed if a site specific analysis determines that no adverse impacts will occur to floodplains, wetlands, perennial streams, or water quality, and a plan to mitigate impacts to water quality is approved. Proposals for linear crossings in these areas will be considered on a case-by-case basis.	CSU	500 feet
Water Resources		Perennial streams	Surface disturbance will be prohibited within 500 feet of perennial streams unless it is determined through site specific analysis and the Area Manager approves in writing, that there is no practicable alternative to the proposed action. If such a circumstance exists, then all practicable measures to mitigate possible harm to these areas must be employed. These mitigating measures would be determined case by case and may include, but are not limited to, diking, lining, screening, mulching, terracing, and diversions. Surface disturbing and construction activities (e.g., mineral exploration and development activities, pipelines, powerlines, roads, recreation sites, fences, wells, etc.) that could adversely affect water quality, and wetland and riparian habitat will avoid the area within 500 feet of perennial streams. Proposals for linear crossings in these areas will be considered on a case-by-case basis. Activities could be allowed if a site specific analysis determines that no adverse impacts will occur to floodplains, wetlands, perennial streams, or water quality, and a plan to mitigate impacts to water quality is approved (Map 25 and Table 7. Appendix 5, BMPs and Guidelines for surfacing disturbing activities.	CSU	500 feet
Water Resources		Riparian areas	Surface disturbing and construction activities (e.g., mineral exploration and development activities, pipelines, powerlines, roads, recreation sites, fences, wells, etc.) that could adversely affect water quality, and wetland and riparian habitat will avoid the area within 500 feet of or on wetlands. Proposals for linear crossings in these areas will be considered on a case-by-case basis. Activities could be allowed if a site specific analysis determines that no adverse impacts will occur to floodplains, wetlands, perennial streams, or water quality, and a plan to mitigate impacts to water quality is approved (Map 25 and Table 7). Surface disturbance will be prohibited within 500 feet of riparian areas, wetlands unless it is determined through site specific analysis and the Area Manager approves in writing, that there is no practicable alternative to the proposed action. If such a circumstance exists, then all practicable measures to mitigate possible harm to these areas must be employed. These mitigating measures would be determined case by case and may include, but are not limited to, diking, lining, screening, mulching, terracing, and diversions.	CSU	500 feet
Water Resources		Wetlands	Surface disturbing and construction activities (e.g., mineral exploration and development activities, pipelines, powerlines, roads, recreation sites, fences, wells, etc.) that could adversely affect water quality, and wetland and riparian habitat will avoid the area within 500 feet of or on wetlands. Proposals for linear crossings in these areas will be considered on a case-by-case basis. Activities could be allowed if a site specific analysis determines that no adverse impacts will occur to floodplains, wetlands, perennial streams, or water quality, and a plan to mitigate impacts to water quality is approved (Map 25 and Table 7).	CSU	500 feet

Table C.3-6 Rock Springs Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/
Cultural Resources		Prehistoric rock quarry site	The site is an exclusion area and is closed to surface disturbing activities that could adversely affect it. Only those surface disturbing activities related to data recovery would be allowed.	NSU	No buffer
Special Designations-ACEC		Greater Red Creek ACEC - Currant Creek Drainage	Greater Red Creek ACEC - Currant Creek Drainage portion (from headwaters west to Currant Creek Ranch) identified Exclusion Area. VRM II.	NSU	No buffer
Special Designations-ACEC		Greater Red Creek ACEC-Sage Creek drainage	Greater Red Creek ACEC- Sage Creek drainage is identified avoidance area. VRM III.	CSU	No buffer
Water Resources		Ephemeral drainages	Surface disturbing activities will be avoided within 100 feet from the inner gorge of ephemeral channels.	CSU	100 feet
Cultural Resources		Cultural site management areas	Vehicular travel is restricted to designated roads in cultural site management areas.	CSU	No buffer
Wildlife-SSS	Sage grouse	Leks	A "controlled surface use" stipulation will be applied from February 1 through May 15, within 1/4 mile radius of active strutting grounds from 6 p.m. to 9 AM, daily. The actual timing of this stipulation can be modified by weather conditions such as fog and cloudy conditions, or clear, bright moonlit nights.	CSU, TL (2/1-5/15)	0.25 mile
Special Designations-Wilderness Study Areas (WSA)		Red Creek Badlands WSA	A controlled surface use stipulation would be applied for activities within 1/4 mile or the visual horizon of the WSA boundary. Actions within or adjacent to the WSAs would be evaluated on a case-by-case basis to determine if appropriate mitigation would be necessary.	CSU	0.25 mile
Water Resources		Sensitive watersheds	Vehicular travel is restricted to designated roads in sensitive watersheds.	CSU	No buffer

Table C.3-7 Rock Springs Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Big Game	All	Winter range, crucial	All surface disturbing activities restricted from Nov. 15 - April 30 in Antelope, elk, moose, and mule deer crucial winter ranges.	TL	11/15 to 4/30	No buffer
Wildlife-Big Game	All	Parturition areas	All surface disturbing activities restricted from May 1 - June 30 in designated parturition areas.	TL	5/1 to 6/30	No buffer
Wildlife-Fish		Game fish spawning areas	All surface disturbing activities restricted during spring or fall spawning, buffer determined on case by case basis.	TL	TBD	No buffer
Wildlife-Raptors	All unspecified	Nests	All surface disturbing activities restricted from Feb. 1 - July 31 within 1/2 mile radius of nests.	TL	2/1 to 7/31	0.5 mile

Table C.3-7 Rock Springs Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Raptors	All unspecified	Winter concentration areas	Activities or surface use will not be allowed from November 15 to April 30 to defined raptor and game bird winter concentration areas.	TL	11/15 to 4/30	No buffer
Wildlife-Raptors	Burrowing owl	Nests	All surface disturbing activities restricted from Feb. 1 - July 31 within 1/2 mile radius of nests.	TL	2/1 to 7/31	0.5 mile
Wildlife-Raptors	Cooper's hawk	Nests	All surface disturbing activities restricted from Feb. 1 - July 31 within 1/2 mile radius of nests.	TL	2/1 to 7/31	0.5 mile
Wildlife-Raptors	Ferruginous hawk	Nests	All surface disturbing activities restricted from Feb. 1 - July 31 within a one-mile (1-mile) radius of nests.	TL	2/1 to 7/31	1.0 mile
Wildlife-Raptors	Golden eagle	Nests	All surface disturbing activities restricted from Feb. 1 - July 31 within 1/2 mile radius of nests.	TL	2/1 to 7/31	0.5 mile
Wildlife-raptors	Merlin	Nests	All surface disturbing activities restricted from Feb. 1 - July 31 within 1/2 mile radius of nests.	TL	2/1 to 7/31	0.5 mile
Wildlife-Raptors	Osprey	Nests	All surface disturbing activities restricted from Feb. 1 - July 31 within 1/2 mile radius of nests.	TL	2/1 to 7/31	0.5 mile
Wildlife-Raptors	Swainson's hawk	Nests	All surface disturbing activities restricted from Feb. 1 - July 31 within 1/2 mile radius of nests.	TL	2/1 to 7/31	0.5 mile
Wildlife-SSS	Sage grouse	Leks	Seasonal restrictions would be applied through Feb. 1 - July 31, within an additional 1.75-mile radius from leks to protect sage grouse nesting habitat. Areas within that radius not used for nesting can be excepted provided actual nesting areas are not affected.	TL	2/1 to 7/31	2 miles
Wildlife-SSS	Sage grouse	Leks	To protect grouse nesting habitat, seasonal restrictions will apply within appropriate distances from the grouse lek. Appropriate distances (up to two miles) and time frames (usually from March 1 through June 30) will be determined on a case-by-case basis (Table 8). Exceptions to seasonal restrictions may be granted, provided the criteria in Appendix 7 can be met.	TL	3/1 to 6/30	≤2 miles
Wildlife-SSS	Sage grouse	Leks	All surface disturbing activities restricted within an up to 2-mile radius of lek between Feb. 1 - July 31.	TL	2/1 to 7/31	≤2 miles

C.3.2.3 Little Snake Field Office, Colorado

References: Record of Decision and Approved Resource Management Plan for Public Lands Administered by the Bureau of Land Management Little Snake Field Office, October 2011 (Chapter 2, Management Decision by Resource; Appendix D—Special Status Species Conservation Measures and Recommendations), Water and Mineral stipulations.

Table C.3-8 Little Snake Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Lands and Realty		WWEC corridor	Designated WWEC corridor is for buried utilities only.	NSU	No buffer
Recreation		Recreation sites, developed	Developed recreation sites (40-acre blocks) are NSU.	NSU	No buffer
Recreation-SRMAs		Juniper Canyon SRMA	NSO, ROW avoidance area; portions are VRM II.	CSU	No buffer
Recreation-SRMAs		Little Yampa SRMA	Portion of Little Yampa Canyon SRMA (within line of sight from the river within the SRMAs)-VRM II, NSO; ROW avoidance areas.	CSU	No buffer
Soils	NA	Erodible, fragile soils and unstable soils	Fragile soils: areas rated as highly or severely erodible by wind or water as described by the Natural Resources Conservation Service (NRCS) in the Area Soil Survey Report or as described by onsite inspection. Fragile soil criteria are also slopes greater than or equal to 35 percent if they have one of the other following soil characteristics: surface texture that is sand, loamy sand, very fine sandy loam, silty clay, or clay; a depth to bedrock of less than 20 inches; an erosion condition rated as “poor”; or a K factor greater than 0.32. Surface disturbing activities will be allowed on isolated sites that meet fragile soil criteria, but only when performance standards and objectives can be met. Surface occupancy on public land will be permitted only where adherence to performance objectives for surface disturbing activities within fragile-soil areas is assured.	CSU	No buffer
Special Designations-Wilderness Study Areas (WSA)		Cross Mountain WSA	WSAs will be managed to preserve their wilderness values according to the IMP (BLM-H-8550-1) and will continue to be managed in that manner until Congress either designates them as wilderness or releases them for other uses. While managed as WSAs, these areas will be managed with a VRM Class I designation. The areas will be closed to oil and gas operations, recommended for withdrawal from mineral location, closed to mineral material sales and non energy leasables, and will not be available for coal leasing. They will be managed as ROW exclusion areas, and will be closed to OHV use. If Congress releases Cross Mountain from wilderness study, it would be managed as an ACEC and would be a ROW exclusion area unless associated with valid existing rights.	NSU	No buffer
Special Designations-WSR		Yampa River segment 1	Manage Yampa River segment 1 (2.8 miles from River Mile #126 to Milk Creek area) as suitable for inclusion in the NWSR System, with the tentative classification of “recreational.” Manage to protect the outstandingly remarkable values, including recreation and fish. Specific management prescriptions within 0.25 miles of each side of the river include OHV limited to designated roads and trails, NSO for oil and gas operations, recommended for withdrawal from locatable minerals, and will not be available for coal leasing.	NSU	0.25 mile
Special Designations-WSR		Yampa River segment 2	Yampa segment 2 (Milk Creek to Duffy Tunnel, scenic) Manage Yampa River segment 2 (15.9 miles from Milk Creek to Duffy Tunnel) as suitable for inclusion in the NWSR System, with the tentative classification of “scenic.” Manage to protect the outstandingly remarkable values, including recreation and fish. Specific management prescriptions within 0.25 miles of each side of the river include OHV limited to designated roads and trails, NSO for oil and gas operations, recommended for withdrawal from locatable minerals, and will not be available for coal leasing.	NSU	0.25 mile

Table C.3-8 Little Snake Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Vegetation-SSS	All	Occupied habitat	There will be CSU stipulations on habitat areas containing special status species, such as federally listed, proposed, and candidate species.	CSU	No buffer
Vegetation-SSS	Utes ladies'-tresses	Known habitat	All proposed ROW projects (powerlines, pipelines, roads, etc.) will be designed and locations selected at least 0.25 miles from any known Ute ladies'-tresses orchid habitat to minimize disturbances. If avoidance of adverse effects is not possible, the Bureau will re-initiate consultation with the Service.	CSU	0.25 mile
Water Resources		Perennial streams	Establish no surface occupancy (NSO) stipulations for up to 0.25 mile from perennial water sources, if necessary, depending on type and use of the water source, soil type, and slope steepness.	NSU	0.25 mile
Wildlife-Aquatic Species-SSS	Colorado River fishes	Critical or occupied habitat	Require NSO stipulations within critical or occupied habitat of Colorado pikeminnow (*Ptychocheiluslucius*), razorback sucker (*Xyrauchentexanus*), humpback chub (*Gila cypha*), and bonytail (*Gila elegans*).	NSU	No buffer
Wildlife-Raptors	All except bald eagle and peregrine falcon	Nests	0.25 miles from nest sites raptors (golden eagle, osprey, all accipiters, falcons [except the kestrel], buteos, and owls, and not including special status species raptors Bald Eagle and Peregrine Falcon).	NSU	0.25 mile
Wildlife-Raptors	Bald eagle	Nests, abandoned	NSO within 100 meter radius of abandoned nests (unoccupied for 5 consecutive years, but with all or part of the nest remaining).	NSU	328 feet
Wildlife-Raptors	Bald eagle	Nests, occupied and unoccupied	Year-round NSO will be applied within a 0.25 mile radius of roost sites and both occupied and unoccupied nests. The definition of an "occupied nest" (from the Northern States Bald Eagle Recovery Plan 1983, page D4) includes (a) young were observed, (b) eggs were laid (eggs or eggshell fragments observed), (c) one adult was observed in incubating ("sitting low") posture on the nest during the incubation period, (d) two adults were observed at an empty nest or within the breeding area, or (e) one adult eagle and one eagle in immature plumage were observed at or near a nest, especially if mating or reproductive behavior (display flights, copulation, nest repair, etc.) was observed.	NSU	0.25 mile
Wildlife-Raptors	Bald eagle	Roosts	New roads and bridges on BLM lands should be located at least 1/2 mile from critical night roosts.	CSU	0.5 mile
Wildlife-Raptors	Peregrine Falcon	Cliff nesting complexes	NSO will be allowed within a 0.25 mile radius of cliff nesting complexes. NSO areas may be altered depending upon the active status of the nesting complex or upon the geographical relationship of topographical barriers and vegetation screening.	NSU	0.25 mile
Wildlife-SSS	All	T&E and candidate species habitat	There will be CSU stipulations on habitat areas containing special status species, such as federally listed, proposed, and candidate species.	CSU	No buffer
Wildlife-SSS	Black-footed ferret	Black-footed ferret reintroduction areas	Active white-tailed prairie dog colonies will continue to be avoidance areas for surface disturbing activities within the black-footed ferret reintroduction area.	CSU	No buffer

Table C.3-8 Little Snake Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Wildlife-SSS	Black-footed ferret	Occupied habitat	Occupied black-footed ferret habitat is designated as a ROW avoidance area. ROWs on public land with the potential to disturb occupied black-footed ferret habitat will be rerouted to avoid those prairie dog towns.	CSU	No buffer
Wildlife-SSS	Black-footed ferret	Prairie dog towns	ROWs on public land with the potential to disturb occupied black-footed ferret habitat will be rerouted to avoid those prairie dog towns.	CSU	No buffer
Wildlife-SSS	Canada lynx	Mapped lynx habitat	NSO will be applied to all mapped lynx habitat.	NSU	No buffer
Wildlife-SSS	Mexican spotted owl	PACs	NSO will be applied to all protected activity centers (PAC).Other surface disturbing activities within protected or restricted habitats, such as prescribed fires and fuels reduction, may occur in specific cases but will require separate Section 7 consultation.	NSU	No buffer
Wildlife-SSS	Mountain plover	Plover nest site	Establish 0.125 mile NSO stipulations around all plover nest sites. The boundaries of the stipulated area may be modified if the authorized officer determines that surface occupancy will not harm the integrity of the nest or nest location.	NSU	0.125 mile
Wildlife-SSS	Prairie dog, white-tailed	Colonies	Surface disturbing activities occurring over more than 1 acre will not be permitted in active prairie dog towns less than 10 acres in size. These activities will be relocated to the edge of the active prairie dog town.	NSU	No buffer
Wildlife-SSS	Sage srouse, Columbian sharp-tailed	Leks	NSO will be allowed within a 0.25 mile radius of a lek site. The NSO area may be altered depending upon the active status of the lek or the geographical relationship of topographical barriers and vegetation screening to the lek site.	NSU	0.25 mile
Wildlife-SSS	Sage grouse, greater	Leks	To reduce potential impacts on greater sage-grouse lek integrity, NSO will be applied within a 0.6 mile radius of a lek site. The NSO area may be altered depending upon the active status of the lek, habitat characteristics, or the geographical relationship of topographical barriers and vegetation screening to the lek site.	NSU	0.6 mile
Wildlife-SSS	Yellow-billed cuckoo	Suitable habitat	Prohibit permanent surface disturbing activities within 0.25 mile of any suitable yellow-billed cuckoo habitat. Exceptions should be evaluated on a case-by-case basis to avoid adverse impact.	NSU	0.25 mile
Wildlife-Waterfowl	Waterfowl	Waterfowl habitat management areas and rookeries	NSO will be allowed on significant production areas, such as waterfowl habitat management areas and rookeries. NSO areas may be altered depending upon the active status of the production areas or upon the geographical relationship of topographical barriers and vegetation screening.	NSU	No buffer

Table C.3-9 Little Snake Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Livestock Grazing	Domestic sheep	Lambing grounds	Exploration (including seismic exploration, drilling, or other development or production activity) will generally not be allowed on domestic sheep lambing grounds during lambing activity. Lambing activities usually fall between April 10 and June 30 and last for approximately 6 weeks. Dates for the six week closure will be determined for each operation as local conditions dictate.	TL	4/1 to 6/30	No buffer
Wild Horses		Entire HMA	No oil- and gas related helicopter or motor vehicle use will be allowed in the wild horse HMA during foaling season, which runs from March 1 to June 30.	TL	3/1 to 6/30	No buffer
Wild Horses		Water sources	No drilling or development operations will be permitted within a 1 mile radius from wild horse water sources from March 1 to December 1.	TL	3/ to 12/1	1 mile
Wildlife-Big Game	All	Winter habitat, crucial	Crucial winter habitat will be closed to surface disturbing activities from December 1 to April 30, with the intent that this stipulation will be applied after the big game hunting season.	TL	12/1 to 4/30	No buffer
Wildlife-Big Game	Big horn sheep	Parturition areas	Bighorn sheep lambing areas will be closed to surface disturbing activities from May 1 to July 15.	TL	5/1 to 7/15	No buffer
Wildlife-Big Game	Elk	Parturition areas	Elk calving areas will be closed to surface disturbing activities from April 16 to June 30.	TL	4/16 to 6/30	No buffer
Wildlife-Big Game	Pronghorn	Parturition areas	Pronghorn antelope fawning areas will be closed to surface disturbing activities from May 1 to July 15.	TL	5/1 to 7/15	No buffer
Wildlife-Fish	Colorado River fishes	Critical or occupied habitat	No work in the active river channel will take place between July 1 and September 30 to prevent adverse effects from sedimentation during spawning; also, no work will take place when larval fishes are drifting in the river channel. Other than pipelines, controlled surface uses crossing any critical or occupied habitat of the Colorado River fishes will require separate Section 7 consultation.	TL	7/1 to 9/30	No buffer
Wildlife-Raptors	Bald eagle	Critical night roosts	Human activity within 0.5 miles of bald eagle critical night roosts on BLM land should be restricted from November 15 to March 15. Buffers can be reduced to 0.25 miles for night roosts if the activity is visually screened by vegetation or topography. Development may be permitted at other periods. If periodic visits, such as those that occur with oil well maintenance work, are required within the buffer zone after development, such activity should be restricted to between the hours of 10 a.m. and 2 p.m. during the period November 15 to March 15.	TL	11/15 to 3/15	0.5 mile
Wildlife-Raptors	Bald eagle	Critical night roosts	If BLM chooses to construct a road or bridge within 1/2 mile of critical night roosts, then the road must be closed to all use from November 15 to March 15. If topography or vegetation provides a visual screen, the buffer can be reduced to 1/4 mile, but the seasonal closure would still be required.	TL	11/15 to 3/15	No buffer
Wildlife-Raptors	Bald eagle	Nests, occupied	No human activity or surface disturbance will be allowed within a 0.5 mile radius of occupied nests from November 15 through July 31.	TL	11/15 to 7/31	0.5 mile

Table C.3-9 Little Snake Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Raptors	Bald eagle	Winter hunting perches	Human activity within 0.25 miles of known bald eagle winter hunting perches should be restricted from November 15 to March 15. Buffers can be reduced to 0.125 miles for hunting perches if the activity is visually screened by vegetation or topography. Development may be permitted at other periods. If periodic visits, such as those that occur with oil well maintenance work, are required within the buffer zone after development, such activity should be restricted to between the hours of 10 a.m. and 2 p.m. during the period November 15 to March 15.	TL	11/15 to 3/15	0.25 mile
Wildlife-Raptors	Ferruginous hawk	Nesting and fledgling habitat	From February 1 to August 15, a 1 mile buffer around nesting and fledgling habitat will be closed to surface disturbing activities to avoid nest abandonment.	TL	2/1 to 8/15	1 mile
Wildlife-Raptors	Osprey	Nesting and fledgling habitat	Osprey nesting and fledgling habitat will be closed to surface disturbing activities from April 1 to August 31. This closure will apply to a 0.5 mile buffer zone around the habitat to avoid nest abandonment.	TL	4/ tp 8/15	0.5 mile
Wildlife-Raptors	Peregrine falcon	Nesting complex	Peregrine falcon cliff nesting complexes will be closed to surface disturbing activities from March 16 to July 31 within a 0.5 mile buffer area around the nesting complex to prevent abandonment and desertion of established territories. However, during years when a nest is unoccupied, or unoccupied by or after May 15, the seasonal stipulation may be excepted. The stipulations may also be excepted once the young have fledged and dispersed from the nest.	TL	3/16 to 7/31	0.5 mile
Wildlife-Raptors	Raptors (golden eagle, osprey, all accipiters, falcons [except the kestrel], buteos, and owls)	Nests	Raptor nesting and fledgling habitat will be closed to surface disturbing activities from February 1 to August 15 within a 0.25 mile buffer zone around the nest site. However, during years when a nest site is unoccupied, or unoccupied by or after May 15, these seasonal limitations may be excepted; they may also be excepted once the young have fledged and dispersed from the nest.	TL	5/1 to 8/15	0.25 mile
Wildlife-SSS	Columbian sharp-tailed grouse	Winter habitat, crucial	Nesting habitat will be closed to surface disturbing activities from March 1 to June 30.	TL	3/1 to 6/30	No buffer
Wildlife-SSS	Columbian sharp-tailed grouse	Winter habitat, crucial	Crucial winter habitat will be closed from December 16 to March 15.	TL	12/16 to 3/15	No buffer
Wildlife-SSS	Greater sage-grouse	Leks	To prevent disturbing up to 75 percent of nesting birds, between March 1 and June 30, greater sage-grouse nesting and early brood-rearing habitat (Map 5) will be stipulated as CSU for oil and gas operations and avoidance areas for other surface disturbing activities within a 4 mile radius of the perimeter of a lek. All surface disturbing activities will avoid only nesting and early brood-rearing habitat within the 4 mile radius of the lek during this time period. Exceptions, modification, or waivers will be granted according to criteria established in Appendix B. The actual area to be avoided will be determined on a case-by-case basis, depending on applicable scientific research and site-specific analysis and in coordination with commodity users and other appropriate entities.	TL	6/1 to 6/30	4 mile
Wildlife-SSS	Greater sage-grouse	Winter habitat, crucial	Crucial winter habitat will be closed from December 16 to March 15. In addition, exceptions would be granted according to criteria established in Appendix B.	TL	12/16 to 3/15	No buffer

Table C.3-9 Little Snake Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-SSS	Greater sandhill crane	Nesting and staging habitat	Nesting and staging habitat areas will be closed to surface disturbing activities from March 1 to October 16.	TL	3/1 to 10/16	No buffer
Wildlife-SSS	Mexican spotted owl	PACs	Activities in PACs that are not surface disturbing will avoid the Mexican spotted owl breeding season, which runs from March 1 through August 31.	TL, CSU	3/1 to 831	No buffer
Wildlife-SSS	Mountain plover	Nest sites	Prohibit surface occupancy and use from April 1 to July 15 within 0.25 mile of all plover nest sites.	TL	4/1 to 7/15	0.25 mile
Wildlife-SSS	Prairie dog, white-tailed	Prairie dog towns	To protect prairie dog pups, surface disturbing activities will not be permitted in prairie dog towns between April 1 and June 15.	TL	4/1 to 6/15	No buffer
Wildlife-SSS	Yellow-billed cuckoo	Suitable habitat	Construction of roads, pipelines, and powerlines through riparian habitat should be placed near the edge of the current YBC habitat. This construction should not occur from June 1 through August 1. Roads, new trails, and rights of way (ROW) should be combined where possible, and stream crossings should be at right angles to YBC habitat to minimize impacts.	TL	6/1 to 8/1	No buffer

C.3.2.4 Grand Junction Field Office, Colorado

References: Grand Junction Resource Area Resource Management Plan and Record of Decision, January 1987 (Management Decisions by Resource; Chapter 2, Resource Decisions; Appendix B—Standard Design Practices; Appendix D—Oil and Gas Leasing Stipulations).

Table C.3-10 Grand Junction Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Cultural Resources		Indian Creek, Rough Canyon, Cactus Park, Sieber Canyon, McDonald Creek, 5ME1358, Ladder Springs and Transect 7	Actively-managed cultural resource sites (Indian Creek, Rough Canyon, Cactus Park, Sieber Canyon, McDonald Creek, 5ME1358, Ladder Springs and Transect 7) are NSO and unsuitable for utilities.	NSU	No buffer
Lands and Realty		Black Ridge corridor	No surface-disturbing activities shall be allowed within the Black Ridge corridor. Designated as unsuitable for public utilities.	NSU	No buffer
Recreation		Recreation sites, developed	Developed recreation sites (Mud Springs, Miracle Rock, Dominguez, The Falls, Island Acres, Vega Reservoir, and Highline Reservoir) are NSO and unsuitable for public utilities.	NSU	No buffer

Table C.3-10 Grand Junction Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Soils		Slopes > 40%	No surface-disturbing activities shall be allowed on lands with 40 percent slope or greater; allow other surface disturbing activities only after analyzing site-specific conditions and potential for safety hazards and reclamation. In order to avoid or mitigate unacceptable impacts to soil, water, and vegetation resources on these lands, special design practices may be necessary and higher than normal costs may result. Where impacts cannot be mitigated to the satisfaction of the authorized office, no surface-disturbing activities shall be allowed. Designated as public utility sensitive area.	CSU	No buffer
Soils	Baxter Pass, Douglas Pass, and Plateau Creek	Erodible, fragile soils and unstable soils	No surface-disturbing activities shall be allowed on unstable and slumping soils in the areas of Baxter Pass, Douglas Pass, and Plateau Creek; allow other surface disturbing activities only after analyzing site-specific conditions and potential for safety hazards and reclamation. Designated as public utility unsuitable area.	NSU	No buffer
Soils	Cactus Park	Erodible, fragile soils and unstable soils	No surface-disturbing activities shall be allowed on critically-eroding soils (Cactus Park).	NSU	No buffer
Special Designations-ACEC		Badger Wash ACEC	ROW avoidance area.	CSU	No buffer
Special Designations-ACEC		Rabbit Valley paleontological site RNA	No surface-disturbing activities shall be allowed in Rabbit Valley paleontological site RNA. Also designated as unsuitable for utilities.	NSU	No buffer
Special Designations-Wilderness Study Areas (WSA)		Demaree WSA	WSA, however, is not deemed as suitable for wilderness and not ID'd as utility unsuitable area.	NSU, CSU	No buffer
Vegetation		Black Ridge Angiosperm areas	Designated as unsuitable for public utilities.	NSU	Vegetation
Vegetation		Pine Mountain Roadsite	Designated as public utility sensitive area.	CSU	No buffer
Vegetation-SSS	All	SSS known habitat	Known habitat designated as public utility sensitive areas. The lessee/operator shall submit a plan for avoidance or mitigation of impacts on the identified species to the authorized officer. This may require completion of an intensive inventory by a qualified biologist. The plan must be approved prior to any surface disturbance. The authorized officer may require additional mitigation measures such as relocation-of proposed roads, drilling sites, or other facilities. Where impacts cannot be mitigated to the satisfaction of the authorized officer, surface occupancy on that area must be prohibited.	CSU	No buffer

Table C.3-10 Grand Junction Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Vegetation-SSS	*Crypanthaelata*	*Crypanthaelat*a site	Identified *Crypanthaelata* sites are designated as public utility sensitive areas. The lessee/operator shall submit a plan for avoidance or mitigation of impacts on the identified species to the authorized officer. This may require completion of an intensive inventory by a qualified biologist. The plan must be approved prior to any surface disturbance. The authorized officer may require additional mitigation measures such as relocation-of proposed roads, drilling sites, or other facilities. Where impacts cannot be mitigated to the satisfaction of the authorized officer, surface occupancy on that area must be prohibited.	CSU	No buffer
Vegetation-SSS	Spineless hedgehog cactus	Occupied habitat	Leasing stipulations and designated as public utility sensitive areas. The lessee/operator shall submit a plan for avoidance or mitigation of impacts on the identified species to the authorized officer. This may require completion of an intensive inventory by a qualified biologist. The plan must be approved prior to any surface disturbance. The authorized officer may require additional mitigation measures such as relocation-of proposed roads, drilling sites, or other facilities. Where impacts cannot be mitigated to the satisfaction of the authorized officer, surface occupancy on that area must be prohibited.	CSU	No buffer
Vegetation-SSS	Uinta basin hookless cactus	Occupied habitat	Leasing stipulations and designated as public utility sensitive areas. The lessee/operator shall submit a plan for avoidance or mitigation of impacts on the identified species to the authorized officer. This may require completion of an intensive inventory by a qualified biologist. The plan must be approved prior to any surface disturbance. The authorized officer may require additional mitigation measures such as relocation-of proposed roads, drilling sites, or other facilities. Where impacts cannot be mitigated to the satisfaction of the authorized officer, surface occupancy on that area must be prohibited.	CSU	No buffer
Visual		VRM Class I and II within Grand Junction FO	Class I and II visual resource management areas (Juanita Arch, The Goblins, Ruby Canyon, Dolores River corridor, Gunnison River corridor, Mount Garfield cliffs, Bang's Canyon cliffs, Sinbad Valley cliffs, Granite Creek cliffs, Unaweep Canyon cliffs, Hunter/Garvey Canyons cliffs, Vega Reservoir viewshed) and black ridge corridor are NSO and unsuitable for utilities.	NSU	No buffer

Table C.3-10 Grand Junction Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Visual		VRM Class III areas with outstanding scenic and landscape values within Grand Junction FO	Special design and reclamation measures may be required to protect the outstanding scenic and natural landscape values of located on the following areas: a. Gunnison River corridor valley bottoms and benches. b. South Shale Ridge. c. Grand Mesa slopes. d. Bang's Canyon benches and mesa tops. e. Sinbad Valley, valley floor, benches. f. Granite Creek benches and mesa tops. g. Unaweep Canyon valley bottoms. h. Hunter/Garvey Canyons benches and mesa tops. i. Face of the Book Cliffs. j. Highway corridors (I-70, 50, 139, 141, and Baxter Pass road). k. Little Book Cliffs Wild Horse Range. l. BLM campground viewshed (Mud Springs, Miracle Rock, and Dominguez). Special design and reclamation measures may include transplanting trees and shrubs, fertilization, mulching, special erosion control structures, irrigation, site recontouring to match the original contour, buried tanks and low profile equipment, and painting to minimize visual contrasts. Surface-disturbing activities may be denied in sensitive areas, such as unique geologic features and rock formations, visually prominent areas, and high recreation use areas.	CSU	No buffer
Water Resources		Municipal/culinary/ public water/reservoirs	All proposed activities will avoid interference with the Jerry Creek Reservoirs' watershed. This may include the relocation of proposed uses, facilities, or application of appropriate mitigation measures.	CSU	No buffer
Water Resources		Municipal/culinary/ public water/reservoirs	All proposed activities will avoid interference with the Palisade municipal watershed. This may include the relocation of proposed uses, facilities, or application of appropriate mitigation measures.	CSU	No buffer
Water Resources		Municipal/culinary/ public water/reservoirs	No surface-disturbing activities shall be allowed on Grand Junction municipal watershed.	CSU	No buffer
Water Resources		Perennial streams	No surface-disturbing activities shall be allowed on Lands within 100 feet of perennial streams, except for essential roads and utility crossings. Designated as public utility sensitive area.	CSU	100 feet
Water Resources		Riparian areas	No surface-disturbing activities shall be allowed on riparian areas.	NSU	No buffer
Water Resources, area specific		Badger Wash Study Area	No surface-disturbing activities shall be allowed on Badger Wash hydrologic study area. Designated as public utility unsuitable area.	NSU	No buffer
Water Resources, area specific		Indian Wash Dam	No surface-disturbing activities shall be allowed on Indian Wash dam. Designated as public utility unsuitable area.	NSU	No buffer

Table C.3-10 Grand Junction Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Wildlife-Aquatic Species	Colorado cutthroat trout	Colorado cutthroat trout	Leasing stipulations and designated as public utility sensitive areas. The lessee/operator shall submit a plan for avoidance or mitigation of impacts on the identified species to the authorized officer. This may require completion of an intensive inventory by a qualified biologist. The plan must be approved prior to any surface disturbance. The authorized officer may require additional mitigation measures such as relocation-of proposed roads, drilling sites, or other facilities. Where impacts cannot be mitigated to the satisfaction of the authorized officer, surface occupancy on that area must be prohibited.	CSU	No buffer
Wildlife-Big Game		Skipper's Island and Rough Canyon	No surface-disturbing activities shall be allowed on Skipper's Island and Rough Canyon wildlife habitat areas. Designated as unsuitable for public utilities; NSO.	NSU	No buffer
Wildlife-Big Game	All	Badger Wash uplands	Badger Wash uplands is designated as public utility sensitive area.	CSU	No buffer
Wildlife-Big Game	Elk	Elk calving areas	No surface-disturbing activities shall be allowed on elk calving sites. Designated as sensitive for public utilities.	NSU, CSU	No buffer
Wildlife-SSS	Black-footed ferret	Black-footed ferret habitat	Leasing stipulations and designated as public utility sensitive areas. The lessee/operator shall submit a plan for avoidance or mitigation of impacts on the identified species to the authorized officer. This may require completion of an intensive inventory by a qualified biologist. The plan must be approved prior to any surface disturbance. The authorized officer may require additional mitigation measures such as relocation-of proposed roads, drilling sites, or other facilities. Where impacts cannot be mitigated to the satisfaction of the authorized officer, surface occupancy on that area must be prohibited.	CSU	No buffer

Table C.3-11 Grand Junction Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wild Horses		Coal Canyon wintering and foaling areas	Prohibit disturbing activities in the Coal Canyon area from December 1 to July I to protect the wild horse wintering and foaling areas.	TL	12/1 to 7/1	No buffer
Wild Horses		Winter range	During periods critical to wild horses, the following restrictions will be applied: (I) No new construction activities will occur; (2) All activities will be conducted during daylight hours only; (3) Vehicular access on a daily basis will be limited to a single trip. Critical periods are December 1 to May 1.	TL	12/1 to 5/1	No buffer
Wildlife-Big Game	Big horn sheep	Winter range	During periods critical to bighorn sheep the following restrictions will be applied: (I) No new construction activities will occur; (2) All activities will be conducted during daylight hours only; (3) Vehicular access on a daily basis will be limited to a single trip. Critical periods are: Bighorn winter range - December 1 to May 1.	TL	12/1 to 5/1	No buffer

Table C.3-11 Grand Junction Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Big Game	Mule deer, elk	Winter range	During periods critical to deer, elk, the following restrictions will be applied: (I) No new construction activities will occur; (2) All activities will be conducted during daylight hours only; (3) Vehicular access on a daily basis will be limited to a single trip. Critical periods are December 1 to May 1.	TL, CSU	12/1 to 5/1	No buffer
Wildlife-Big Game	Elk	Parturition areas	In elk Calving areas the following restrictions will be applied: (I) No new construction activities will occur; (2) All activities will be conducted during daylight hours only; (3) Vehicular access on a daily basis will be limited to a single trip. Critical periods are May 15 to June 15.	TL, CSU	5/15 to 6/15	No buffer
Wildlife-Raptors	Bald eagle	Winter concentration areas	Protect bald eagle concentration areas from surface-disturbing activities from December 1 to April 1.	TL	12/1 to 4/1	No buffer
Wildlife-Raptors	Peregrine falcon	Nest (only includes active nest buffer area)	Protect active peregrine falcon nests from surface-disturbing activities from March 15 to July 1.	TL	3/15 to 7/1	No buffer
Wild Horses		Foaling areas	During periods critical to wild horses, the following restrictions will be applied: (I) No new construction activities will occur; (2) All activities will be conducted during daylight hours only; (3) Vehicular access on a daily basis will be limited to a single trip. Critical periods are March 1 to July 1.	TL	3/1 to 7/1	No buffer

C.3.2.5 White River Field Office, Colorado

References: White River Field Office Record of Decision and Approved Resource Management Plan, July 1997 (Chapter 2, Resource Management Decisions; Appendix A—Surface Stipulations Applicable to All Surface Disturbing Activities; Appendix B—Conditions of Approval).

Table C.3-12 White River Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Lands and Realty		Dragon Trail-Atchee Ridge corridor	Dragon Trail-Atchee Ridge corridor follows the route once proposed as the Rangely loop segment of the Northwest Pipeline Expansion Project. It runs south from Rangely, to the vicinity of Baxter Pass, is approximately 1-mile wide, and will accommodate all buried linear facilities.	CSU	No buffer
Soils		Erodible, fragile soils and unstable soils	Identified soils are considered unstable and subject to slumping and mass movement. Surface occupancy will not be allowed in such areas delineated from USDA SCS Order III Soil Surveys.	NSU	No buffer

Table C.3-12 White River Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Special Designations-ACEC		Coal Oil Rim ACEC	These ACECs are known to contain, or have acres potential to contain, T/E plants or plants that are candidates for listing as T/E. State of Colorado plant -White River species of concern, BLM sensitive plants, remnant Riparian (950 vegetation associations, and/or unique plant acres) communities. A plant inventory will be conducted prior to approving any surface disturbing activities within the ACEC boundaries. Surface disturbance will not be allowed within mapped locations of these plants. The presence of the above listed plants would require relocating surface disturbance or facilities more than 200 meters. The timing required for (18,260 acres) conducting the plant inventories may require deferring activities longer than 60 days. NSO stipulations will be attached to all use authorizations encompassing these areas. Motorized vehicle travel within designated ACECs will be allowed only on designated roads and trails.	CSU	No buffer
Special Designations-ACEC		Oil Spring Mountain ACEC	These ACECs are known to contain, or have acres potential to contain, T/E plants or plants that are candidates for listing as T/E. State of Colorado plant -White River species of concern, BLM sensitive plants, remnant Riparian (950 vegetation associations, and/or unique plant acres) communities. A plant inventory will be conducted prior to approving any surface disturbing activities within the ACEC boundaries. Surface disturbance will not be allowed within mapped locations of these plants. The presence of the above listed plants would require relocating surface disturbance or facilities more than 200 meters. The timing required for (18,260 acres) conducting the plant inventories may require deferring activities longer than 60 days. NSO stipulations will be attached to all use authorizations encompassing these areas. Motorized vehicle travel within designated ACECs will be allowed only on designated roads and trails.	CSU	No buffer
Special Designations-ACEC		White River Riparian ACEC	Managed for recreation as roadless natural. These ACECs are known to contain, or have acres potential to contain, T/E plants or plants that are candidates for listing as T/E. State of Colorado plant -White River species of concern, BLM sensitive plants, remnant Riparian (950 vegetation associations, and/or unique plant acres) communities. A plant inventory will be conducted prior to approving any surface disturbing activities within the ACEC boundaries. Surface disturbance will not be allowed within mapped locations of these plants. The presence of the above listed plants would require relocating surface disturbance or facilities more than 200 meters. The timing required for (18,260 acres) conducting the plant inventories may require deferring activities longer than 60 days. NSO stipulations will be attached to all use authorizations encompassing these areas. Motorized vehicle travel within designated ACECs will be allowed only on designated roads and trails.	CSU	No buffer
Vegetation-SSS	All	BLM sensitive plants and RVAs	No surface occupancy will be allowed within known populations of BLM sensitive plants and remnant vegetation associations (RVAs). Motorized travel within known locations of sensitive plants and high priority RVAs that are located outside ACECs is limited to designated roads and trails.	NSU, CSU	No buffer

Table C.3-12 White River Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Vegetation-SSS	All	Federally listed species known and potential habitat	No Surface Occupancy (NSO) stipulation will be placed on known and potential habitat of federally-listed and candidate T/E plants. New T/E plant habitat mapped as a result of future surveys will also be protected by a NSO stipulation. This stipulation will apply to all surface disturbing activities within these areas. All known and potential T/E habitat, including ACECs, will be exclusion areas for new Rights-of-Way authorizations. Land use authorizations will be denied in exclusion areas, with the exception of short-term land use permits involving no development, and projects that are consistent with management objectives for the area.	NSU	No buffer
Water Resources		Riparian areas	Surface disturbing activities would be required to avoid riparian habitat.	CSU	No buffer
Wildlife-Raptors	Bald eagle	Nests	Surface Occupancy is not allowed within 0.25 mile of Bald Eagle nests. Prior to authorizing surface disturbance within Nest, Roost, and Perch habitat, and pending conferral consultation with the USFWS as required by the Endangered Species Act, the Area Manager may require the proponent/applicant to submit a plan of development that would demonstrate that: 1) involvement of cottonwood stands or cottonwood regeneration areas have been avoided to the extent practicable; 2) special reclamation measures or design features are incorporated that would accelerate recovery and/or reestablishment of affected cottonwood communities: 3) the pre-development potential of affected floodplains to develop or support riverine cottonwood communities has not been diminished: and 4) the current/future utility of such cottonwood substrate for bald eagle use would not be impaired.	NSU, CSU	0.25 mile
Wildlife-Raptors	Bald eagle	Roosts	Surface Occupancy is not allowed within 0.25 mile of Bald Eagle Roost/Concentration Areas. Prior to authorizing surface disturbance within Nest, Roost, and Perch habitat, and pending conferral consultation with the USFWS as required by the Endangered Species Act, the Area Manager may require the proponent/applicant to submit a plan of development that would demonstrate that: 1) involvement of cottonwood stands or cottonwood regeneration areas have been avoided to the extent practicable; 2) special reclamation measures or design features are incorporated that would accelerate recovery and/or reestablishment of affected cottonwood communities: 3) the pre-development potential of affected floodplains to develop or support riverine cottonwood communities has not been diminished: and 4) the current/future utility of such cottonwood substrate for bald eagle use would not be impaired.	NSU, CSU	0.25 mile
Wildlife-Raptors	Raptors, non-SSS	Nests	Disruptive surface occupation or adverse habitat modification will be prohibited within l/8 mile of non-listed members (i.e. not listed, proposed, candidate, and BLM sensitive) of the raptor group.	NSU	0.125 mile
Wildlife-Raptors	Raptors, SSS (listed, proposed, candidate, and BLM sensitive)	Nests	Disruptive surface occupation or adverse habitat modification will be prohibited within l/4 mile of functional nest sites of special status species (i.e. listed, proposed, candidate, and BLM sensitive).	NSU	0.25 mile
Wildlife-SSS	Sage grouse	Leks	This area encompasses sage grouse leks. Surface Occupancy is not allowed within l/4 mile of identified lek sites.	NSU	0.25 mile

Table C.3-12 White River Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Special Designations-Wilderness Study Areas (WSA)		Bull Canyon WSA	Bull Canyon WSA will be managed under the Interim Management Policy For Lands Under Wilderness Review. Except for certain valid existing rights, activities will not be allowed to occur in WSAs that will impair wilderness values or the area's suitability for preservation as wilderness. WSAs are ROW exclusion areas. Land use authorizations will be denied in exclusion areas, with the exception of short-term land use permits involving no development, and projects that are consistent with management objectives for the area.	NSU, CSU	No buffer
Special Designations-Wilderness Study Areas (WSA)		Willow Creek WSA	Skull Mountain WSA will be managed under the Interim Management Policy For Lands Under Wilderness Review. Except for certain valid existing rights, activities will not be allowed to occur in WSAs that will impair wilderness values or the area's suitability for preservation as wilderness. WSAs are ROW exclusion areas. Land use authorizations will be denied in exclusion areas, with the exception of short-term land use permits involving no development, and projects that are consistent with management objectives for the area.	NSU, CSU	No buffer
Special Designations-Wilderness Study Areas (WSA)		Skull Mountain WSA	Skull Mountain WSA will be managed under the Interim Management Policy For Lands Under Wilderness Review. Except for certain valid existing rights, activities will not be allowed to occur in WSAs that will impair wilderness values or the area's suitability for preservation as wilderness .WSAs are ROW exclusion areas. Land use authorizations will be denied in exclusion areas, with the exception of short-term land use permits involving no development, and projects that are consistent with management objectives for the area.	NSU, CSU	No buffer
Cultural Resources		Canyon Pintado National Historic District	This is a controlled surface use area for the protection of cultural resources. The Area Manager may approve actions within this area if an environmental analysis and inventory indicates that the proposed action is compatible with the intent of the Historic District, and can comply with Historic District cultural resource protection requirements. All proposed actions will be reviewed for conflicts with known archaeological or historical resources. In areas of conflicts, a pedestrian inventory of the proposed project area will be completed by a qualified archaeologist using standards specified by the BLM. The Area Manager may require that a qualified archaeologist be present to monitor operations during surface disturbing activities. If archaeological resources are located during the inventory, the proposed action will be relocated to avoid and protect the cultural values. Proposed actions that produce vibrations will be located a distance far enough away from rock art or structural features to allow full attenuation of the vibration before it gets to the resource of concern. All inventories are required to be submitted to the BLM in report form and are subject to review by the Colorado State Historic Preservation Office and the Advisory Council on Historic Preservation prior to approval of the proposed action. Surface Occupation may not be allowed to occur in order to protect cultural resources.	CSU	No buffer
Soils		Saline Soils derived from Manco shale	Surface disturbing activities will be allowed in these areas only after an engineered soils derived construction/reclamation plan is submitted by the operator and approved by the Area Manager.	CSU	No buffer
Soils		Slopes > 35%	Surface disturbing activities will be allowed in fragile soils on Slopes >35% only after an engineered soils derived construction/reclamation plan is submitted by the operator and approved by the Area Manager.	CSU	No buffer

Table C.3-12 White River Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Vegetation		Aspen, serviceberry and chokecherry communities	Blue Mountain Deciduous Browse/Aspen/Serviceberry/Chokecherry Communities are a controlled surface use area in order to maintain and the distribution, condition, and functional capacity of deciduous browse and aspen communities integral to high priority big game and blue grouse habitats. Prior to authorizing activities in this area, the proponent/applicant would be required to submit a plan of development that would demonstrate that: 1) involvement of aspen, serviceberry, and chokecherry associations have been avoided to the extent possible: 2) special reclamation measures or design features would promote accelerated recovery or establishment of desirable plant community components: 3) the potential or capacity of the area to support viable, self-sustaining aspen, serviceberry, and chokecherry communities has not been diminished; 4) involvement of community derived values are mitigated through project life commensurate with projected impacts. Surface disturbance or occupation within aspen, serviceberry, and chokecherry communities may be prohibited.	CSU	No buffer
Visual		VRM Class II and III areas within White River FO	Measures may be required to protect scenic and natural landscape values. These design and measures may include transplanting trees and shrubs, mulching and fertilizing disturbed areas, use of low profile permanent facilities, and painting to minimize visual contrasts. Surface disturbing activities may be moved up to 200 meters to avoid sensitive areas or to reduce the visual effects of the proposal. These measures would be applied to the following VRM Class II and III areas: Canyon Pintado National Historic District; Highways 13, 40, 64, and 139 corridors; Viewsheds in the Blue Mountain/Moosehead GRA; White River Corridor; Douglas and Baxter Pass divide; Cathedral Bluffs; and VRM Class II areas around Meeker. These measures may also be applied to other areas on a case by case basis.	CSU	No buffer
Wildlife-Aquatic Species	Colorado cutthroat trout	Aquatic trout habitat (habitats occupied by populations of Colorado River cutthroat trout)	Prior to authorizing surface disturbance of occupied stream reaches or within watersheds contributing to occupied habitats, the Area Manager may require the proponent/applicant to submit a plan of development that would demonstrate that the proposed action would not: 1) increase stream gradient: 2) result in a net increase in sediment contribution; 3) decrease stream channel sinuosity: 4) increase the channel width to depth ratio; 5) increase water temperature; 6) decrease vegetation derived stream shading; and 7) degrade existing water quality parameters, including specific conductance, turbidity, organic/inorganic contaminant levels, and dissolved oxygen in occupied reaches or contributing perennial or intermittent tributaries. If approvals are granted and development results in these standards being exceeded, additional measures would be required to correct the deficiencies.	CSU	No buffer
Wildlife-Avian	Avian	Nest sites of all special status and tree-nesting species	Permitted land use activities within l/4 mile of functional nest sites of cavity, cliff, and ground-nesting species, and within l/2 mile of functional nest sites of special status and tree-nesting species, will be subject to relocation or design modifications to preclude, or reduce to acceptable levels, long-term reduction or deterioration.	CSU	No buffer

Table C.3-12 White River Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Wildlife-SSS	Black-footed ferret	Potential habitat for wild or reintroduced populations	Lands within this lease parcel involve prairie dog ecosystems that constitute potential habitat for wild or reintroduced populations of the federally endangered black footed ferret. Conservation and recovery efforts for the black-footed ferret are authorized by the Endangered Species Act of 1973 (as amended). The successful lessee may be required to perform special conservation measures prior to and during lease development. These measures may include one or more of the following: 1. Performing site-specific habitat analysis and/or participating in ferret surveys. 2. Participating in the preparation of a surface use plan of operations with BLM, USFWS, and COW, which integrates and coordinates long term lease development with measures necessary to minimize adverse impacts to black-footed ferrets or their habitat. 3. Abiding by special daily and seasonal activity restrictions on construction, drilling, product transport, and service activities. 4. Incorporating special modifications to facility siting, design, construction, and operation. 5. Providing in-kind compensation for habitat loss and/or displacement (e.g. special on-site rehabilitation/revegetation measures or off-site habitat enhancement).	CSU	No buffer
Wildlife-SSS	Black-footed ferret	Black-footed ferret Reintroduction Area	Prior to authorizing activities in this area, the Area Manager will confer or consult with the USFWS as required by Section I of the Endangered Species Act. Depending on the scope of the proposed action, a plan of development may be required that demonstrates how the proposed activities would be conducted or conditioned to: 1) avoid the direct or indirect loss of black-footed ferrets: or 2) avoid affecting the capability of the site to achieve reestablishment objectives. The Area Manager may impose land use measures and limitations derived from a site specific ferret reintroduction and management plan. The measures and limitations would be designed to avoid, or reduce to acceptable levels, the short and long term adverse effects on ferret survival, behavior, reproductive activities, and/or the area's capacity to sustain ferret population objectives.	CSU	No buffer
Wildlife-SSS	Sage grouse	Sage grouse habitat	Conversion or adverse modification of the following sage grouse habitats will be avoided: 1) sagebrush stands with ≤50 percent canopy and ≤30" in height, and ≤2 miles from a lek; 2) sagebrush stands with ≤30 percent canopy and ≤30" in height; >2 miles from a lek on occupied summer ranges; 3) any sagebrush stand on slopes ≤0 20 percent in defined winter concentration areas; and 4) sagebrush stands on slopes ≤20 percent showing evidence of winter use.	CSU	2 mile

Table C.3-13 White River Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wild Horses		Foaling areas	During periods critical to wild horses, the following restrictions will be applied: (I) No new construction activities will occur; (2) All activities will be conducted during daylight hours only; (3) Vehicular access on a daily basis will be limited to a single trip. Critical periods are March 1 to July 1.	TL	3/1 to 6/15	No buffer

Table C.3-13 White River Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wild Horses		Foaling areas	In order to protect wild horses within this area, intensive development activities may be delayed for a specified 60 day period within the spring foaling period between March 1 and June 15.	TL	3/1 to 6/15	No buffer
Wildlife-Big Game	All	Winter range, severe	No development activity in big game severe winter range is allowed from December 1 through April 30. Exceptions apply.	TL	12/1 to 4/30	No buffer
Wildlife-Big Game	Mule deer, elk	Summer range	This stipulation will not take effect until direct and indirect impacts to suitable summer range habitats exceed 10% of that available within the individual Game Management Units. When this threshold has been reached, no further development activity will be allowed from May 15 through August 15. Exceptions apply.	TL	5/15 to 8/15	No buffer
Wildlife-Big Game	All	Parturition areas	All surface disturbing activities restricted from May 1 - June 30 in designated parturition areas.	TL	5/1 to 6/30	No buffer
Wildlife-Raptors	All listed, candidate T/E &/ BLM sensitive species except bald eagle and ferruginous hawks)	Nests	No development activities are allowed within ½ mile of identified nest sites from February 1 through August 15, or until fledgling and dispersal of young. Exceptions apply.	TL	2/1 to 8/15	0.25 mile
Wildlife-Raptors	All raptors other than T/E and candidate T/E species	Nests	No development activities are allowed within ¼ mile of identified nests from February 1 through August 15, or until fledgling and dispersal of young. Exceptions apply.	TL	2/1 to 8/15	0.125 mile
Wildlife-Raptors	Bald eagle	Nests	No development is allowed within 1/2 mile of identified nests from December 15 through July 15, or until fledgling and dispersal of young.	TL	12/15 to 7/15	0.5 mile
Wildlife-Raptors	Bald eagle	Roosts, winter concentration areas	No development is allowed within ½ mile of identified sites from November 15 through April 15. Exceptions apply.	TL	11/15 to 4/15	0.5 mile
Wildlife-Raptors	Ferruginous hawk	Nests	No development is allowed within one (1) mile of identified nests from February 1 through August 15, or until fledgling and dispersal of young. Exceptions apply.	TL	2/1 to 8/15	1.0 mile
Wildlife-SSS	Sage grouse	Leks	If direct and indirect impacts to suitable nesting cover exceeds 10 percent of the habitat available within 2 miles of identified leks, further development will not be allowed from April 15 through July 7. (Development can occur until 10 percent of the habitat associated with a lek is impacted, from then on, additional activity can occur from July 8 through April 14).	TL	4/15 to 7/7	2 miles
Wildlife-SSS	Sage grouse	Winter habitat	This area encompasses sagebrush habitats that are occupied by wintering concentrations of grouse, or represent the only habitats that remain available for use during periods of heavy snowpack. No development activity will be allowed between December 16 and March 15.	TL	12/16 to 3/15	No buffer

C.3.2.6 Vernal Field Office, Utah

References: Vernal Field Office Record Of Decision And Approved Resource Management Plan, October 2008 (Management Decision by Resource; Appendix A—Best Management Practices for Raptors and Their Associated Habitats In Utah, August 2006; Appendix K—Surface Stipulations Applicable to all Surface-Disturbing Activities; Appendix L—Utah's Threatened and Endangered Species Lease Notices for Oil and Gas Development and BLM-committed Conservation Measures; Appendix R—Fluid Minerals BMPs).

Table C.3-14 Vernal Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Cultural Resources		Little Hole and Devils Hole area	The Little Hole and Devils Hole areas will be open for oil and gas leasing, subject to controlled surface-use (CSU) stipulations to protect cultural sites that include lithic scatters, burials, tool manufacturing sites, structures, and rock shelters.	CSU	No buffer
Cultural Resources		Upper Willow Creek area of the Book Cliffs	To preserve the unique representation of the Archaic period, the surface disturbing activities would be subject to timing and controlled surface use stipulations.	CSU, TL	No buffer
Cultural Resources		Four Mile Wash area (Section 18, T10S, R19E)	To protect traditional sacred properties, the area would be open for oil and gas leasing and other surface disturbing activities subject to timing and controlled surface-use stipulations or NSO. *[Per the RMP, ROWs exclusion and avoidance areas are consistent with areas closed to oil and gas leasing or with a no surface occupancy stipulation, respectively.]*	CSU	No buffer
Cultural Resources		Uinta foothills area	The area would be open for oil and gas leasing and other surface disturbing activities subject to timing and controlled surface-use stipulations or NSO. *[Per the RMP, ROWs exclusion and avoidance areas are consistent with areas closed to oil and gas leasing or with a no surface occupancy stipulation, respectively.]*	CSU	No buffer
Lands and Realty		ROW corridors	Future ROWs that cross the Lower or Upper Green River will be placed in the Four Mile Bottom Area or at the Head of Little Swallow Canyon.	CSU	No buffer
Recreation		Recreation sites, developed	All developed recreation sites within VFO will be closed to all forms of surface-disturbing activities not directly related to recreation development. Developed recreation sites would be closed to the shooting of firearms, grazing, and all forms of surface-disturbing activities. An exemption would be granted if the disturbance were related to recreational infrastructure support.	NSU	No buffer
Soils		Slopes between 21-40%	If surface-disturbing activities cannot be avoided on slopes from 21-40% a plan would be required. The plan would be approved by BLM prior to construction and maintenance and include: • An erosion control strategy• GIS modeling• Proper survey and design by a certified engineer. The surface operating standards for oil and gas exploration and development (Gold Book) would be used as a guide for surface-disturbing proposals on steep slopes/hillsides.	CSU	No buffer

Table C.3-14 Vernal Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Soils		Slopes > 40%	For slopes greater than 40%, allow NSO. If after an environment analysis the authorized officer determines that it would cause undue or unnecessary degradation to pursue other placement alternatives, surface occupancy in the NSO area may be authorized. Additionally a plan would be submitted by the operator and approved by BLM prior to construction and maintenance and include: • An erosion control strategy; • An erosion control strategy; • Proper survey and design by a certified engineer. Modifications also may be granted if a more detailed analysis, i.e. Order I, soil survey conducted by a qualified soil scientist finds that surface disturbance activities could occur on slopes greater than 40% while adequately protecting the area from accelerated erosion.	CSU	No buffer
Special Designations-ACEC		Lears Canyon ACEC (1,375 ac)	ROW avoidance area. Leasing NSO in Lears Canyon ACEC to protect relict vegetation areas, OHV use will be closed or limited to designated routes. VRM II.	NSU	No buffer
Special Designations-ACEC		Lower Green River ACEC - (8,470 acres)	ROW avoidance area. Leasing NSO allowed within line of sight or up to one-half mile from the centerline of the river, whichever is less. OHV use will be limited to designated routes. VRM Class II. Approximately 71 acres will be open to leasing subject to moderate constraints such as TLs and CSU. Approximately 8,079 acres will be open to leasing subject to major constraints such as NSO stipulations. No areas open to standard tips, no areas unavailable for leasing. Future facilities would be placed within the existing ROW corridor near the Four Mile Bottom area where an existing pipeline crosses the Green River. 8,079 NSO; 71 CSU/TL.	CSU	No buffer
Special Designations-ACEC		Nine Mile Canyon ACEC	ROW avoidance area. Managed to enhance cultural and special status plant FO species while enhancing scenic vistas, recreation, and wildlife resource values. A comprehensive integrated activity plan will be developed / implemented. OHV use will be limited to designated routes.	CSU	No buffer
Special Designations-National Monuments		Areas adjacent to Dinosaur National Monument	Minimize noise and light pollution adjacent to Dinosaur National Monument using best available technology such as installation of multi-cylinder pumps, hospital sound reducing mufflers, and placement of exhaust systems to direct noise away from the monument. Additionally, there would be a requirement to reduce light pollution by using methods such as limiting height of light poles, timing of lighting operations (meaning limiting lighting to times of darkness associated with drilling and work over or maintenance operations), limiting wattage intensity, and constructing light shields. However, this requirement is not applicable if it affects human health and safety. Movement of operations to mitigate sound and light impacts would be required to be at least 200 m from the Monument boundary for VRM Classes II, III and IV. Exception: An exception may be granted if a determination is made that natural barriers or view sheds would meet these mitigation objectives or if human health and safety were adversely affected.	CSU	200 meters (656 feet)
Special Designations-WSR		Lower Green River from the public land boundary south of Ouray to the Carbon County line	The segment of the Lower Green River from the public land boundary south of Ouray to the Carbon County line will continue to be managed as previously recommended as a suitable scenic segment to protect its outstandingly remarkable values. Management will include: Oil and Gas Leasing – NSO; Mineral Materials – Closed; OHV – Closed and limited to designated routes; VRM – Classes I and II.	NSU	No buffer

Table C.3-14 Vernal Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Vegetation-SSS	Clay reed-mustard	Occupied habitat	Clay reed-mustard conservation measures: 4. Within occupied habitat, project infrastructure will be designed to avoid direct disturbance and minimize indirect impacts to populations and to individual plants: a. Where standard surveys are technically infeasible, infrastructure and activities will avoid all suitable habitat (avoidance areas) and incorporate 300' buffers, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat; b. Follow the above recommendations (#3) for project design within suitable habitats; c. To avoid water flow and/or sedimentation into occupied habitat and avoidance areas, silt fences, hay bales, and similar structures or practices will be incorporated into the project design; appropriate placement of fill is encouraged; d. Construction of roads will occur such that the edge of the right of way is at least 300' from any plant and 300' from avoidance areas; f. The edge of the well pad should be located at least 300' away from plants and avoidance areas, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat; and k. Place produced oil, water, or condensate tanks in centralized locations, away from occupied habitat. Roads will be graveled within occupied habitat.	CSU	300 feet
Vegetation-SSS	Shrubby reed-mustard	Occupied habitat	Within occupied habitat, project infrastructure will be designed to avoid direct disturbance and minimize indirect impacts to populations and to individual plants: a. Follow the above (#3) recommendations for project design within suitable habitats; b. Construction of roads will occur such that the edge of the right of way is at least 300' from any plant,; d. The edge of the well pad should be located at least 300' away from plants; g. Before and during construction, areas for avoidance should be visually identifiable in the field (e.g., flagging, temporary fencing, rebar, etc.); h. Where technically and economically feasible, use directional drilling or multiple wells from the same pad, ;i. Designs will avoid concentrating water flows or sediments into occupied habitat; j. Place produced oil, water, or condensate tanks in centralized locations, away from occupied habitat. Roads will be graveled within occupied habitat.	CSU	300 feet from plants
Vegetation-SSS	Ute ladies'-tresses	Occupied habitat	Within occupied habitat, project infrastructure will be designed to avoid direct disturbance and minimize indirect impacts to populations and to individual plants: a. Follow the above (#3) recommendations for project design within suitable habitats; b. Buffers of 300 feet minimum between right of way (roads and surface pipelines) or surface disturbance (well pads) and plants and populations will be incorporated; c. Surface pipelines will be laid such that a 300-foot buffer exists between the edge of the right of way and the plants, using stabilizing and anchoring techniques when the pipeline crosses habitat to ensure the pipelines don't move towards the population; f. Designs will avoid altering site hydrology and concentrating water flows or sediments into occupied habitat; g. Place produced oil, water, or condensate tanks in centralized locations, away from occupied habitat, with berms and catchment ditches to avoid or minimize the potential for materials to reach occupied or suitable habitat.	CSU	300 feet

Table C.3-14 Vernal Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Water Resources		100-year floodplains, municipal/culinary /public water/reservoirs, riparian areas	Allow no new surface-disturbing activities within active flood plains, public water reserves, or 100 meters of riparian areas unless there are no practical alternatives, impacts will be fully mitigated, and the action is designed to enhance the riparian resources. The following mitigation measures could be included as applicable: • Keep construction of all new stream crossings to a minimum. Stream crossings with culverts will be designed and constructed to allow fish passage, where needed. All stream crossings will be designed and constructed to keep impacts to riparian and aquatic habitat to a minimum. • Relocate existing routes out of riparian areas where feasible or necessary to restore watershed and riparian stability.	NSU	100 meters (328 feet)
Wildlife-Aquatic species-SSS	Bonytail, Colorado pikeminnow, humpback chub, and razorback sucker	Colorado, Green, Duchesne, Price, White, and San Rafael rivers.	Colorado Pikeminnow, Humpback Chub, and Razorback Sucker Conservation Measures: 3.b. Surface-disturbing activities [other than oil and gas activities] maybe restricted within 1/4 mile of the channel centerline of the Colorado, Green, Duchesne, Price, White, and San Rafael Rivers.	NSU	0.25 miles of channel centerline
Wildlife-Big Game	Deer	Crucial deer winter range	Within crucial deer winter range, no more than 10% of such habitat will be subject to surface disturbance and remain un-reclaimed at any given time. (Exception: This stipulation may be excepted if either the resource values change or the lessee/operator demonstrates to BLMs satisfaction that impacts can be mitigated.)	CSU	No buffer
Wildlife-Big Game	Deer	Crucial deer winter range – recommendation only	It is preferred that surface-disturbing actions within crucial deer winter range will be located in pinyon juniper rather than browse where both vegetation types occur.	CSU	No buffer
Wildlife-Raptors	Raptors, all	Nests	Raptor management will be guided by the use of "Best Management Practices for Raptors and Their Associated Habitats in Utah" (Utah BLM, 2006, Appendix A), utilizing seasonal and spatial buffers, as well as mitigation, to maintain and enhance raptor nesting and foraging habitat, while allowing other resource uses. Spatial and temporal buffers applied to disturbances in the vicinity of nesting raptors will be tailored to the individual raptor species involved and based on factors such as line of sight distance between nest and disturbance, type and duration of disturbance, nest structure security, sensitivity of the species to disturbance, observed responses to related disturbances, and the amount of other disturbances already occurring in the vicinity. Land use activities which would have an adverse impact on an occupied raptor nest, would not be allowed within the spatial or seasonal buffer.	NSU	Refer to Raptor Guide

Table C.3-14 Vernal Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Wildlife-SSS	Canda Lynx	Occupied denning habitat	Avoid all surface disturbing actions within occupied denning habitat. Limit disturbance to and within suitable habitat by staying on approved access routes. Limit new access routes created by the project. Dirt and gravel roads traversing lynx habitat (particularly those that could become highways) should not be paved or otherwise upgraded (e.g., straightening of curves, widening of roadway etc.) in a manner that is likely to lead to significant increases in traffic volume, traffic speed, increased width of the cleared ROW, or would foreseeably contribute to development or increases in human activity in lynx habitat. When these types of upgrades are proposed, a thorough analysis of potential direct and indirect impacts to lynx and lynx habitat should be conducted. Minimize impacts to habitats that support lynx prey.	CSU	No buffer
Wildlife-SSS	Mexican spotted owl	Nests or PACs	No actions will occur within 0.5 mile of identified nest site. -If nest site is unknown, no activity will occur within the designated Protected Activity Center (PAC). –Avoid placing permanent structures within 0.5 mi of suitable habitat unless surveyed and not occupied. –Reduce noise emissions (e.g., use hospital-grade mufflers) to 45 dBA at 0.5mile from suitable habitat, including canyon rims (Delaney et al. 1997). Placement of permanent noise-generating facilities should be determined by a noise analysis to ensure noise does not encroach upon a 0.5 mile buffer for suitable habitat, including canyon rims. -Limit disturbances to and within suitable owl habitat by staying on designated routes. –Limit new access routes created by the project. A permanent action continues for more than one breeding season and/or causes a loss of owl habitat or displaces owls through disturbances, i.e., creation of a permanent structure. For all temporary actions that may impact owls or suitable habitat: -If action occurs entirely outside of the owl breeding season, and leaves no permanent structure or permanent habitat disturbance, action can proceed without an occupancy survey. -If action will occur during a breeding season, survey for owls prior to commencing activity. If owls are found, activity should be delayed until outside of the breeding season. -Eliminate access routes created by a project through such means as raking out scars, revegetation, gating access points, etc. Temporary activities are defined as those that are completed prior to the start of the following raptor breeding season, leaving no permanent structures and resulting in no permanent habitat loss.	NSU	0.5 mile
Wildlife-SSS	Prairie dog, white-tailed	White-tailed prairie dogs	No surface-disturbing activities within 660 feet of prairie dog colonies identified within prairie dog habitat. No permanent aboveground facilities are allowed within the 660-foot buffer. Exception: An exception may be granted by the AO if the applicant submits a plan that indicates that impacts of the proposed action can be adequately mitigated or, if due to the size of the town, there is no reasonable location to develop a lease and avoid colonies the AO will allow for loss of prairie dog colonies and/or habitat to satisfy terms and conditions of the lease. The AO may modify the boundaries of the stipulation area if portions of the area does not include prairie dog habitat or active colonies are found outside the current defined area, as determined by the BLM.	NSU	660 feet from colonies
Wildlife-SSS	Sage grouse	Leks	No surface-disturbing activities within 0.25 mile of active Sage-grouse leks will be allowed year round.	NSU	0.25 mile

Table C.3-14 Vernal Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Wildlife-SSS	Sage grouse	Leks	No permanent facilities or structures will be allowed within 2 miles of active sage grouse leks when possible.	CSU	2 miles
Wildlife-SSS	Sage grouse	Leks	Within 0.5 mile of known active leks, the best available technology will be used to reduce noise, e.g., installation of multi-cylinder pumps, hospital sound-reducing mufflers, and placement of exhaust systems.	CSU	0.5 mile

Table C.3-15 Vernal Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Vegetation-SSS	Clay reed-mustard	Occupied habitat	Construction activities not related to oil and gas development may be restricted from May 1st through June 5 within occupied habitat; the operator is encouraged to apply water for dust abatement to such areas from May 1 to June 5 (flowering period); dust abatement applications will be comprised of water only.	TL, CSU	5/1 to 6/5	No buffer
Vegetation-SSS	Shrubby reed-mustard	Occupied habitat	Construction activities not related to oil and gas development may be restricted from April 15th through May 30th within occupied habitat. The operator is encouraged to apply water for dust abatement to such areas from April 15 to May 30 (flowering period); dust abatement applications will be comprised of water only.	TL, CSU	4/15 to 5/30	No buffer
Wildlife- Big Game	Deer, elk	Parturition areas	In order to protect crucial elk calving and deer fawning habitat, exploration, drilling, and other development activity will not be allowed from May 15 through June 30. Maintenance of producing wells will be allowed. Specific exceptions may be granted by the BLM if the proposed activity will not seriously disturb wildlife habitat values being protected. This determination will be made by a BLM wildlife biologist in coordination with the UDWR and, if appropriate, the USFS. Such a determination may result if fawning is completed early and the fawning area is abandoned earlier to allow for disturbing activities for fluid mineral leasing and exploration to start earlier than July 31.	TL	5/15 to 6/30	No buffer

Table C.3-15 Vernal Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife- Big Game	Deer, elk	Winter habitat, crucial	Activities that will result in adverse impacts to deer and elk within crucial winter range will not be allowed from December 1 through April 30. This restriction will not apply if deer and/or elk are not present, or if it is determined through analysis and coordination with UDWR that impacts will be mitigated. Factors to be considered will include snow depth, temperature, snow crusting, location of disturbance, forage quantity and quality, animal condition, and expected duration of disturbance. The stipulation could be modified based on findings of collaborative monitoring and analysis. For example, the winter range configuration and time frames could be changed if current animal use patterns are determined to be inconsistent with the dates and boundaries established. This stipulation could be waived if it is determined through collaborative monitoring and analysis that the area is not crucial winter range or that timing restrictions are unnecessary.	TL	12/1 to 4/30	No buffer
Wildlife- Big Game	Pronghorn	Parturition areas	Do not allow activities that will result in adverse impacts to antelope from May 1 through June 30 to minimize stress and disturbance during crucial antelope birthing time. An exception may be granted to these dates by the authorized officer if the operator submits a plan which demonstrates that impacts from the proposed action can be adequately mitigated or if it is determined the habitat is not being utilized for fawning in any given year. The authorized officer may modify the boundaries of the stipulation area if a portion of the area is not being used as fawning grounds or if habitat is being utilized outside of stipulation boundaries as crucial fawning grounds and needs to be protected. May be granted if the fawning grounds are determined to be unsuitable or unoccupied and there is no reasonable likelihood of future use of the fawning grounds.	TL	5/1 to 6/30	No buffer
Wildlife-Raptors	Bald eagle	Nests	No surface disturbance within a 1 mile buffer of active nests from 1/1 – 8/31, unless the area has been surveyed according to protocol and determined to be unoccupied.	TL	1/1 to 8/31	1 mile
Wildlife-Raptors	Boreal owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 2/1 – 7/31.	TL	2/1 to 7/31	0.25 mile
Wildlife-Raptors	Burrowing owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.25 mile
Wildlife-Raptors	California condor	Nests	No surface disturbance within 1 mile buffer of active nests during breeding season (undefined).	TL	undefined	1.0 mile
Wildlife-Raptors	Cooper's hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Ferruginous hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/1.	TL	3/1 to 8/1	0.5 mile
Wildlife-Raptors	Flammulated owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 9/30.	TL	4/1 to 9/30	0.25 mile
Wildlife-Raptors	Golden eagle	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 1/1 – 8/31.	TL	1/1 to 8/31	0.5 mile
Wildlife-Raptors	Great horned owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 12/1 – 9/31.	TL	12/1 to 9/31	0.25 mile
Wildlife-Raptors	Long-eared owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 2/1 – 8/15.	TL	2/1 to 8/15	0.25 mile
Wildlife-Raptors	Merlin	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.5 mile
Wildlife-Raptors	Mexican spotted owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.25 mile

Table C.3-15 Vernal Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Raptors	Northern goshawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/15.	TL	3/1 to 8/15	0.5 mile
Wildlife-Raptors	Northern harrier	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/15.	TL	4/1 to 8/15	0.5 mile
Wildlife-Raptors	Northern pygmy owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 8/1.	TL	4/1 to 8/1	0.25 mile
Wildlife-Raptors	Northern saw-whet owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.25 mile
Wildlife-Raptors	Osprey	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.5 mile
Wildlife-Raptors	Peregrine falcon	Nests	No surface disturbance within a 1 mile buffer of active nests from 2/1 – 8/31.	TL	2/1 to 8/31	1 mile
Wildlife-Raptors	Prairie falcon	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.25 mile
Wildlife-Raptors	Red-tailed hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Sharp-shinned hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Short-eared owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/1.	TL	3/1 to 8/1	0.25 mile
Wildlife-Raptors	Swainson's hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.5 mile
Wildlife-Raptors	Turkey vulture	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 5/1 – 8/15.	TL	5/1 to 8/15	0.5 mile
Wildlife-Raptors	Western screech owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/15.	TL	3/1 to 8/15	0.25 mile
Wildlife-SSS	Black-footed ferret	Known home ranges	Activities involving the development or construction of temporary or permanent surface disturbances would be prohibited within 1/8 mile boundaries of known home ranges of female ferrets during the "critical" period from May 1 thru July 15. Exceptions: Ephemeral surface disturbance (disturbance in prairie dog habitat for less than six months, after which it again becomes or can be made suitable for prairie dog use), such as prescribed fire or herbicide treatment, may be conducted within 1/8 mile of the boundary of the home range of a female from March 1 to May 1. In general, the disturbance should be completed before the critical period begins. The Service, UDWR, and the land management agencies would determine if this exemption applies. Normal travel and surveying activities would not be restricted.	TL	5/1 to 7/15	0.125 mile
Wildlife-SSS	Canada lynx	Potential denning habitat	Avoid construction and surface disturbing actions in proximity to potential denning habitat during the breeding season (mid-April to July).Avoid construction and surface disturbing actions in proximity to potential denning habitat during the breeding season (mid-April to July). Activities involved with routine maintenance and operation will only occur during daytime hours, when lynx are least active.	TL	Mid-April to July	No buffer
Wildlife-SSS	Sage grouse	Leks	No surface-disturbing activities within two miles of active Sage-grouse leks will be allowed from March 1 through June 15.	TL	March 1 through June 15	2 miles

C.3.2.7 Moab Field Office, Utah

References: Record of Decision for the Approved Moab Resource Management Plan and FEIS, October 1998 (Management Decisions by Resource; Appendix A—Stipulations and Environmental Best Practices Applicable to Oil and Gas Leasing and Other Surface-disturbing Activities; Appendix Q—Conservation Measures for Threatened and Endangered Species of Utah from the Use Plan Programmatic Bas and Section 7 Consultation; Appendix R—Best Management Practices for Raptors and their Associated Habitats in Utah), Maintenance Forms.

Table C.3-16 Moab Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Minerals		Three Rivers and Westwater mineral withdrawal area	There will be no surface-disturbing activities within the area of the Three Rivers and Westwater mineral withdrawals which includes suitable Wild and Scenic River segments. Where the NSO area is physically inaccessible to oil and gas drilling by current directional drilling technology (1 mile from outside the NSO area), it will be closed to oil and gas leasing. However, these lands remain NSO for all other surface-disturbing activities.	NSU	No buffer
Minerals-Split estate		Thompson Springs	No surface-disturbing activities are allowed on private surface/Federal minerals within Thompson springs. An exception could be granted if it can be demonstrated that the action would not result in any surface use conflicts.	NSU	No buffer
Water Resources		100-year floodplains	No surface disturbing activities within 100 year floodplains.	NSU	No buffer
Water Resources		Municipal/culinary/ public water/ reservoirs	No surface disturbing activities within public water reserves.	NSU	No buffer
Water Resources		Riparian areas	No surface disturbing activities within 100 meters of riparian areas.	NSU	100 meters (328 feet)
Water Resources		Springs	No surface disturbing activities within 100 meters of springs.	NSU	100 meters (328 feet)
Wildlife-Aquatic species-SSS	Colorado River fishes	100-year floodplain of the Colorado River, Green River, and at the Dolores/Colorado River confluence	Surface-disturbing activities within the 100 year floodplain of the Colorado River, Green River, and at the Dolores/Colorado River confluence will not be allowed. In areas adjacent to 100-year floodplains, particularly in systems prone to flash floods, BLM will analyze the risk for flash floods to impact facilities. Potential techniques may include the use of closed loop drilling and pipeline burial or suspension as necessary to minimize the potential for equipment damage and resultant leaks or spills.	NSU, CSU	No buffer
Wildlife-Aquatic species-SSS	Colorado River fishes	Colorado, Green, Duchesne, Price, White, and San Rafael fivers	Surface-disturbing activities will be restricted within ¼ mile of the channel centerline of the Colorado, Green, Duchesne, Price, White, and San Rafael Rivers.	NSU	0.25 of channel centerline
Wildlife-Kit fox	Kit fox	Kit fox habitat	No surface disturbance within 200 meters of kit fox dens in suitable habitat.	NSU	200 meters (656 feet)

Table C.3-16 Moab Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Wildlife-Raptors	Bald eagle	Nests	No permanent structures allowed within 1.0 mile of nest sites. A permanent action continues for more than one breeding or roosting season and/or causes a loss of eagle habitat or displaces eagles through disturbances, i.e., creation of a permanent structure.	NSU	1.0 mile
Wildlife-Raptors	California condor	Nests	No surface disturbance within a 1 mile buffer of active nests. No permanent structures allowed within 1.0 mile of nest sites.	NSU, CSU	1.0 mile
Wildlife-SSS	Mexican spotted owl	MSO habitat and nest sites	For all permanent actions that may impact owls or suitable habitat: -Survey two consecutive years for owls according to established protocol prior to commencing of activity. -If owls are found, no actions will occur within 0.5 mile of identified nest site. -If nest site is unknown, no activity will occur within the designated Protected Activity Center (PAC). -Avoid placing permanent structures within 0.5 mi of suitable habitat unless surveyed and not occupied. -Reduce noise emissions (e.g., use hospital-grade mufflers) to 45 dBA at 0.5 mile from suitable habitat, including canyon rims (Delaney et al. 1997). Placement of permanent noise-generating facilities should be determined by a noise analysis to ensure noise does not encroach upon a 0.5 mile buffer for suitable habitat, including canyon rims. -Limit disturbances to and within suitable owl habitat by staying on designated routes. -Limit new access routes created by the project. A permanent action continues for more than one breeding season and/or causes a loss of owl habitat or displaces owls through disturbances, i.e., creation of a permanent structure.	NSU, CSU	0.5 mile
Wildlife-SSS	Mexican spotted owl	MSO habitat and nest sites	For all temporary actions that may impact owls or suitable habitat: -If action occurs entirely outside of the owl breeding season, and leaves no permanent structure or permanent habitat disturbance, action can proceed without an occupancy survey. -If action will occur during a breeding season, survey for owls prior to commencing activity. If owls are found, activity should be delayed until outside of the breeding season. -Eliminate access routes created by a project through such means as raking out scars, revegetation, gating access points, etc. Temporary activities are defined as those that are completed prior to the start of the following raptor breeding season, leaving no permanent structures and resulting in no permanent habitat loss.	NSU, CSU	No buffer
Wildlife-SSS	Prairie dog, white-tailed	Colonies	No surface disturbing activities within 660 feet of prairie dog colonies within prairie dog habitat. No permanent above ground structures within the 660 foot buffer.	NSU, CSU	660 feet
Wildlife-SSS	Southwestern willow flycatcher	Suitable riparian habitats	Activities will maintain a 300 feet buffer from suitable riparian habitat year long.	NSU	300 foot
Wildlife-SSS	Southwestern willow flycatcher	Suitable riparian habitats	All surface-disturbing activities should be restricted within a 0.25 mile buffer from suitable riparian habitats.	NSU	0.25 mile

Table C.3-16 Moab Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Soils		Slopes > 30%	A controlled surface use stipulation is applied in the Approved RMP to protect fragile soils on steep slopes from erosion. This stipulation prohibits construction on slopes greater than 30% unless an engineering plan can demonstrate that erosion on these slopes would be prevented.	CSU	No buffer
Vegetation-SSS	All	Listed or candidate plants or animals	As required by the Endangered Species Act, the protection of habitat for listed and non-listed plant and animal species will be considered prior to authorizing any actions that could alter or disturb such habitat. No management action will be permitted on public lands that will jeopardize the continued existence of plant or animal species that are listed or are officially proposed or are candidates for listing as T&E. Surveys of habitat or potential habitat for special status species (including any sensitive species under consideration for formal designation as T&E) will be made prior to taking any action that could affect these species. Surveys will be conducted using protocols established for potentially affected species.	CSU	No buffer
Visual		VRM Class II areas within Moab FO	Within VRM II areas (rims of Canyon Rims SRMA, Wilson Arch, the Kane Creek Corridor, and the Gemini Bridges area), surface-disturbing activities must meet the objectives of VRM II class objectives. The level of change to the landscape should be low; management activities may be seen, but should not attract attention of the casual observer. Any change to the landscape must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. Surface-disturbing activities that are determined to be compatible and consistent with the protection or enhancement of the resource values are exempted. Recognized utility corridors are exempted only for utility projects which would be managed according to VRM III objectives.	CSU	No buffer
Wildlife-Aquatic species-SSS	Colorado River fishes	Current populations and known habitats	Designs must avoid as much direct disturbance to current populations and known habitats as is feasible. Designs should include: protections against toxic spills into rivers and floodplains; plans for sedimentation reduction; minimization of riparian vegetation loss or degradation; pre-activity flagging of critical areas for avoidance; design of stream-crossings for adequate passage of fish; and measures to avoid or minimize impacts on water quality at the 25-year frequency runoff.	CSU	No buffer
Wildlife-Aquatic species-SSS	Colorado River fishes	Floodplains or riparian areas	Surface-disturbing activities proposed to occur within floodplains or riparian areas will be avoided unless there is no practical alternative or the development would enhance riparian/aquatic values. If activities must occur in these areas, construction will be designed to include mitigation efforts to maintain, restore, and/or improve riparian and aquatic conditions. If conditions could not be maintained, offsite mitigation strategies should be considered.	CSU	No buffer
Wildlife-Aquatic species-SSS	Colorado River fishes	Upper Colorado River drainage basin above Lake Powell	Water depletions from any portion of the Upper Colorado River drainage basin above Lake Powell are considered to adversely affect and adversely modify the critical habitat of these endangered fish species. Section 7 consultation will be completed with the Service prior to any such water depletions.	CSU	No buffer
Wildlife-Raptors	Bald eagle	Roosts	No permanent structures allowed within 0.5 miles of winter roost areas. A permanent action continues for more than one breeding or roosting season and/or causes a loss of eagle habitat or displaces eagles through disturbances, i.e., creation of a permanent structure.	CSU	0.5 mile
Wildlife-Raptors	California condor	Roosts	No permanent structures allowed within 0.5 miles of established roost areas or sites.	CSU	0.5 mile

Table C.3-16 Moab Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Wildlife-SSS	Mexican spotted owl	MSO habitat and nest sites	BLM will require monitoring of activities in designated critical habitat, identified PACs, or breeding habitats, wherein it has been determined that there is a potential for take. If any adverse impacts are observed to occur in a manner, or to an extent that was not considered in the project-specific Section 7 Consultation, then consultation must be reinitiated. Monitoring results should document what, if any, impacts to individuals or habitat occur during project construction/implementation. In addition, monitoring should document successes or failures of any impact minimization, or mitigation measures. Monitoring results would be considered an opportunity for adaptive management, and as such, would be carried forward in the design and implementation of future projects. For all survey and monitoring actions: -Reports must be provided to affected field offices within 15 days of completion of survey or monitoring efforts. -Report any detection of Mexican spotted owls during survey or monitoring to the authorized officer within 48 hours.	CSU	No buffer
Wildlife-SSS	Mexican spotted owl	MSO habitat and nest sites	BLM will, as a condition of approval (COA) on any project proposed within identified PACs, designated critical habitat, or within spatial buffers for Mexican spotted owl nests (0.5 mile), ensure that project proponents are notified as to their responsibilities for rehabilitation of temporary access routes and other temporary surface disturbances, created by their project, according to individual BLM Field Office standards and procedures, or those determined in the project-specific Section 7 Consultation.	CSU	0.5 mile
Wildlife-SSS	Mexican spotted owl	MSO habitat and nest sites	BLM will, in areas of designated critical habitat, ensure that any physical or biological factors (i.e., the primary constituent elements), as identified in determining and designating such habitat, remains intact during implementation of any BLM-authorized activity. For all BLM actions that "may adversely affect" the primary constituent elements in any suitable Mexican spotted owl habitat, BLM will implement measures as appropriate to minimize habitat loss or fragmentation, including rehabilitation of access routes created by the project through such means as raking out scars, revegetation, gating access points, etc. Prior to surface-disturbing activities in Mexican spotted owl PACs, breeding habitats, or designated critical habitat, specific principles should be considered to control erosion. These principles include: -Conduct long-range transportation planning for large areas to ensure that roads will serve future needs. This will result in less total surface disturbance. -Avoid surface disturbance in areas with high erosion hazards to the greatest extent possible. Avoid mid-slope locations, headwalls at the source of tributary drainages, inner valley gorges, and excessively wet slopes such as those near springs. In addition, avoid areas where large cuts and fills would be required. -Locate roads to minimize roadway drainage areas and to avoid modifying the natural drainage areas of small streams. Project developments should be designed, and located to avoid direct or indirect loss or modification of Mexican spotted owl nesting and/or identified roosting habitats. Water production associated with BLM authorized actions should be managed to ensure maintenance or enhancement of riparian habitats.	CSU	No buffer
Wildlife-SSS	Southwestern willow flycatcher	Suitable riparian habitats	Permanent surface disturbances should be avoided within 0.5 mile of suitable Southwestern willow flycatcher habitat.	CSU	0.5 mile

Table C.3-17 Moab Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Soils		Saline soils in Mancos Shale (330,142 acres)	No surface-disturbing activities are allowed during the period from December 1 to May 31. This restriction includes heavy equipment traffic on existing roads associated with drilling operations.	TL	12/1 – 5/31	No buffer
Wildlife-Big Game	All	Parturition areas	All surface disturbing activities restricted from May 1 - June 15 in designated parturition areas.	TL	5/1 to 6/15	No buffer
Wildlife-Raptors	Bald eagle	Nests	No surface disturbance within a 1-mile buffer of active nests from 1/1 – 8/31.	TL	1/1 to 8/31	1.0 mile
Wildlife-Raptors	Bald eagle	Roosts, winter concentration areas	Temporary activities or habitat alterations that may disturb bald eagles will be restricted within 0.5 mile of known winter concentration areas [winter roost areas (cottonwood galleries)] from November 1st to March 31st unless the area has been surveyed according to protocol and determined to be unoccupied. Additionally, where daily activities must occur within these spatial buffers, and are approved through subsequent consultation, activities should be properly scheduled to occur after 9 a.m. and terminate at least one hour before official sunset to ensure that bald eagles using these roosts are allowed the opportunity to vacate their roost in the morning and return undisturbed in the evening. A temporary action is completed prior to the following breeding or roosting season leaving no permanent structures and resulting in no permanent habitat loss.	TL	11/ 1 to 3/31	0.5 mile
Wildlife-Raptors	Boreal owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 2/1 – 7/31.	TL	2/1 to 7/31	0.25 mile
Wildlife-Raptors	Burrowing owl	Nests	No surface disturbance or occupancy within a 0.25 mile buffer of active nests during breeding/nesting season (from 3/1 – 8/31).	TL	3/1 to 8/31	0.25 mile
Wildlife-Raptors	California condor	Nests	Temporary activities will not occur within 1.0 mile of occupied nest sites during breeding season. A temporary action is completed prior to the following important season of use, leaving for habitat functionality.	TL	breeding season (undefined)	1.0 mile
Wildlife-Raptors	California condor	Roosts	Temporary activities will not occur within 0.5 miles of occupied roost areas between 8/1 – 11/31. A temporary action is completed prior to the following important season of use, leaving for habitat functionality.	TL	8/1 – 11/31	0.5 mile
Wildlife-Raptors	Cooper's hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Ferruginous hawk	Nests	No surface disturbance or occupancy within a 0.5 mile buffer of active nests during breeding/nesting season (from 3/1 – 8/1).	TL	3/1 to 8/1	0.5 mile
Wildlife-Raptors	Flammulated owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 9/30.	TL	4/1 to 9/30	0.25 mile
Wildlife-Raptors	Golden eagle	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 1/1 – 8/31.	TL	1/1 to 8/31	0.5 mile
Wildlife-Raptors	Great horned owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 12/1 – 9/31.	TL	12/1 to 9/31	0.25 mile
Wildlife-Raptors	Long-eared owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 2/1 – 8/15.	TL	2/1 to 8/15	0.25 mile
Wildlife-Raptors	Merlin	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.5 mile
Wildlife-Raptors	Northern goshawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/15.	TL	3/1 to 8/15	0.5 mile

Table C.3-17 Moab Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Raptors	Northern harrier	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/15.	TL	4/1 to 8/15	0.5 mile
Wildlife-Raptors	Northern pygmy owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 8/1.	TL	4/1 to 8/1	0.25 mile
Wildlife-Raptors	Northern saw-whet owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.25 mile
Wildlife-Raptors	Osprey	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.5 mile
Wildlife-Raptors	Peregrine falcon	Nests	No surface disturbance within a 1 mile buffer of active nests from 2/1 – 8/31.	TL	2/1 to 8/31	1.0 mile
Wildlife-Raptors	Prairie falcon	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.25 mile
Wildlife-Raptors	Red-tailed hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Screech owl, western	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/15.	TL	3/1 to 8/15	0.25 mile
Wildlife-Raptors	Sharp-shinned hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Short-eared owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/1.	TL	3/1 to 8/1	0.25 mile
Wildlife-Raptors	Swainson's hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.5 mile
Wildlife-Raptors	Turkey vulture	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 5/1 – 8/15.	TL	5/1 to 8/15	0.5 mile
Wildlife-SSS	Mexican spotted owl	Nests	No temporary actions within 0.5 miles of suitable habitat during breeding season. A temporary action is completed prior to the following breeding season leaving no permanent structures and resulting in no permanent habitat loss.	TL	3/1 – 8/15	0.5 mile
Wildlife-SSS	Mexican spotted owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.25 mile
Wildlife-SSS	Southwestern willow flycatcher	Occupied breeding habitat	Activities within 0.25 mile of occupied breeding habitat will not occur during the breeding season of May 1 to August 15.	TL	5/1 – 8/15	0.25 mile
Wildlife-SSS	Yellow-billed cuckoo	Habitat (riparian areas)	No surface-disturbing activities will be conducted within 100 meters of Yellow-billed Cuckoo habitat (riparian areas) from May 15th through July 20th.	TL	5/15 – 7/20	100 meters (325 feet)

C.3.2.8 Price Field Office, Utah

References: Price Field Office Record of Decision for the Approved Resource Management Plan, October 2008 (Appendix R-3—Stipulations for Surface Disturbing Activities; Appendix R-5—Best Management Practices for Raptors and Their Associated habitats in Utah, August 2006).

Table C.3-18 Price Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Cultural Resources	Historic trails	Old Spanish Trail- Big Flat to Walker Flat (Emery/Sevier County Line) Segment	The following will be implemented along the Old Spanish Trail: Big Flat to Walker Flat (Emery/Sevier County Line) Segment: Limit OHV use to designated routes; Manage for motorized recreation uses; ROWs allowed within the designated corridor; Manage for VRM objectives in areas open to oil and gas leasing subject to minor constraints (these areas of overlap are VRM Class III).	NSU outside corridor	No buffer
Cultural Resources	Historic trails	Old Spanish Trail-Green River Crossing (via Cottonwood Wash) to Big Flat Segment	The following will be implemented along the Old Spanish Trail: Green River Crossing (via Cottonwood Wash) to Big Flat Segment:• Limit OHV use to designated routes• Manage for VRM objectives (overlaps VRM Classes I, II, and III)• ROWs allowed within the designated corridor• CSU for leasing.	NSU outside corridor	No buffer
Cultural Resources	Historic trails	Old Spanish Trail-Lost Springs Wash/Trail Springs Wash segment	NSO within Trail Springs/Lost Springs Wash segment of the Old Spanish National Historic Trail to retain the historic character of the trail.; Avoid ROWs except where the designated corridor crosses the trail; Limit OHV use to designated routes; VRM Class III (existing).	NSU outside corridor	No buffer
Lands and Realty		All areas outside of designated corridors	All utility corridors within the PFO are designated for any size utility and transportation uses needed. The corridors are 1 mile in width crossing any BLM-administered public lands. These approved corridors will be the preferred location for future major linear ROWs that meet the following criteria: • Transmission (not distribution) lines with a voltage capacity of 69 kV or greater • Significant conduits requiring a permanent width greater than 50 feet Any new utility corridors will require a plan amendment.	NSU	No buffer
Recreation		Recreation sites, developed	NSO within developed recreation and administrative sites not consistent with the purpose of the site, including those authorized under a Recreation and Public Purpose Act.	NSU	No buffer
Soils		Slopes > 40%	NSO on slopes greater than 40 percent (except as allowed through exceptions, waivers, or modifications as described in Appendix R-3).	NSU	No buffer
Soils		Slopes between 20 and 40%	In surface disturbing proposals regarding construction on slopes of 20 percent to 40 percent, include an approved erosion control strategy and topsoil segregation/restoration plan. Such construction must be properly surveyed and designed by a certified engineer and approved by the BLM prior to project implementation, construction, or maintenance	CSU	No buffer
Special Designation-Non-WSAs with Wilderness Characteristics		Mexican Mountain non-WSA	The following stipulations will be applied within the Mexican Mountain WSA: • VRM Class II• Limit OHV use and all mechanical travel to designated routes• Closed to activities related to geophysical operations• Avoidance area for ROWs.	CSU	No buffer
Special Designations-ACEC		Heritage Sites ACEC (Wilsonville; Smith Canyon)	New utility corridor exclusion areas.	NSU	No buffer

Table C.3-18 Price Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Special Designations-ACEC		Nine Mile Canyon ACEC	Price: NSO for leasing; VRM Class II and III; Utility corridor will be allowed as shown on Map R-21; other utility restrictions not discussed. Within Vernal: Will be managed to enhance cultural and special status plant FO species while enhancing scenic vistas, recreation, and wildlife resource values. A comprehensive integrated activity plan will be developed / implemented. OHV use will be limited to designated routes.	CSU	No buffer
Special Designations-ACEC		Rock Art ACEC (Big Hole, Cottonwood Canyon, Dry Wash, Grassy Trail, Kings Crown, Molen Seep, North Salt Wash, Pictographs, Sand Cove, Short Creek	New utility corridor exclusion areas. NSO for cultural values within areas of critical environmental concern (ACEC) to retain the cultural character and context of the area. The existing ACEC will be maintained (Black Dragon, Head of Sinbad, Rochester/Muddy Petroglyphs, and Lone Warrior); however, the following sites will be managed as part of the Rock Art ACEC (5,300 acres): King's Crown, Short Creek, Molen Seep, Big Hole, North Salt Wash, Pictographs, and Cottonwood Canyon. (The portion of the Rock Art ACEC that is overlain by the Mexican Mountain and San Rafael Reef WSAs will be managed in accordance with the IMP, where the IMP is more restrictive than the prescriptions below.) The Rock Art ACEC will be excluded from ROW grants. OHV use will be limited to designated routes. NSO for leasing.	NSU	No buffer
Special Designations-ACEC		San Rafael Canyon ACEC	The San Rafael Canyon ACEC will be avoided from ROW grants and managed as a VRM Class II. OHV use will be limited to designated routes. NSO for leasing. New utility corridor avoidance area.	CSU	No buffer
Special Designations-ACEC		Uranium Mining District ACEC	Oil and gas will be open to leasing subject to major constraints (NSO); No disturbance of historic structures until the historic features have been recorded and oral history has been conducted.	CSU	No buffer
Special Designations-Wilderness Study Areas (WSA)		Mexican Mountain WSA	All WSAs are utility corridor exclusion areas. All WSAs will be managed according to the Interim Management Policy for Lands Under Wilderness Review (BLM Handbook H-8550-1) until legislation is enacted to either designate the areas as wilderness or release them for uses other than wilderness. All WSAs are VRM I and either closed for limited to designated for OHV. All WSAs will be managed as VRM Class I in accordance with BLM IM 2000-096 Use of Visual Resource Management Class I Designation in WSAs.	NSU, CSU	No buffer
Special Designations-Wilderness Study Areas (WSA)		Sids Mountain/Sids Cabin WSA	All WSAs are utility corridor exclusion areas. All WSAs will be managed according to the Interim Management Policy for Lands Under Wilderness Review (BLM Handbook H-8550-1) until legislation is enacted to either designate the areas as wilderness or release them for uses other than wilderness. All WSAs are VRM I and either closed for limited to designated for OHV. All WSAs will be managed as VRM Class I in accordance with BLM IM 2000-096 Use of Visual Resource Management Class I Designation in WSAs.	NSU, CSU	No buffer
Vegetation-SSS	All	Listed or candidate plants or animals or critical habitat	Surface disturbances will be prohibited that may affect listed species or critical habitat of listed or candidate plants or animals without consultation or conference (ESA, Section 7) between the BLM and USFWS.	CSU	No buffer
Visual Resources		VRM Class II areas within Price FO	Within VRM II areas, surface disturbing activities would comply with BLM Manual Handbook 8431-1 to retain the existing character of the landscape. Recognized utility corridors are exempt. Temporary exceedance may be allowed during initial development phases.	CSU	No buffer

Table C.3-18 Price Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Water Resources		Perennial streams; intermittent streams	No new surface disturbance (excluding fence lines) would be required in areas equal to the 100-year floodplain or 100 meters (330 feet) on either side from the centerline, whichever is greater, along all perennial and intermittent streams, streams with perennial reaches, and riparian areas.	NSU	300 feet or 100-yr floodplain, whichever greater
Water Resources		Springs	No surface disturbance or occupancy would be maintained around natural springs to protect the water quality of the spring. The distance would be based on geophysical, riparian, and other factors necessary to protect the water quality of the springs. If these factors cannot be determined, a 660-foot buffer zone would be maintained. The BLM will allow development of spring sources but will require protection of the spring source to maintain water quality and avoid detrimental impacts.	NSU	660 feet
Wildlife-SSS	All	T&E and candidate species habitat	Surface disturbances will be prohibited that may affect listed species or critical habitat of listed or candidate plants or animals without consultation or conference (ESA, Section 7) between the BLM and USFWS.	NSU	No buffer
Wildlife-SSS	Mexican spotted owl	Designated critical habitat	Any surface use or occupancy within designated critical habitat would be strictly controlled through close scrutiny of any surface use plan filed to protect habitat values and the use of the area by Mexican spotted owls. Modifications to the Surface Use Plan of Operations may be required for the protection of these resources. This limitation may apply to operation and maintenance of producing wells.	CSU	No buffer
Wildlife-SSS	Mexican spotted owl	Nests	NSO within 1/2 mile of known Mexican Spotted Owl (MSO) nests.	NSU	0.5 mile
Wildlife-SSS	Prairie dog, white-tailed	Colonies	NSO within 660 feet of prairie dog colonies within identified prairie dog habitat, No permanent above ground structures within 660 feet.	NSU	660 feet
Wildlife-SSS	Sage grouse	Leks	All surface disturbing activities will be prohibited within ½ mile of greater sage-grouse leks on a year-round basis.	NSU	0.5 mile

Table C.3-19 Price Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Water		Watersheds above 7,000 feet in elevation	To minimize watershed damage to the watersheds above 7,000 feet in elevation, no construction activities will be allowed in these areas during the period beginning December 1 through April 15	TL	12/1 to 4/15	No buffer
Wildlife-Big Game	All	Winter range, crucial	Mule deer, moose, and elk winter range would be closed seasonally from December 1 to April 15 within crucial winter habitat	TL	12/1 to 4/15	No buffer

Table C.3-19 Price Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Big Game	Big horn sheep	Spring/lambing range	Desert bighorn sheep and Rocky Mountain bighorn sheep spring/lambing range would be closed seasonally from April 15 to June 15 within desert bighorn sheep and Rocky Mountain bighorn sheep crucial year-long habitat.	TL	4/15 to 6/15	No buffer
Wildlife-Big Game	Mule deer, elk	Parturition areas	Mule deer fawning and elk calving areas would be closed seasonally from May 15 to July 5 within crucial fawning and calving areas as located within the crucial summer habitat.	TL	5/15 to 7/5	No buffer
Wildlife-Migratory Birds	All	High-value breeding habitat	Migratory bird nesting areas would be closed seasonally from April 15 to August 1 within high-value breeding habitat. Birds designated as BLM Special Status Species would have the highest priority.	TL	4/15 to 8/15	No buffer
Wildlife-Raptors	All not specified	Nesting complexes and known raptor nest sites	Raptor nesting complexes and known raptor nest sites would be closed seasonally February 1 to July 15 (within ½ mile of nests occupied within past 3 years) and raptor crucial cliff-nesting complex habitats.	TL	2/1 to 7/15	0.25 mile
Wildlife-Raptors	Bald eagle	Nests	No surface disturbance within a 1 mile buffer of active nests from 1/1 – 8/31.	TL	1/1 to 8/31	1.0 mile
Wildlife-Raptors	Boreal owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 2/1 – 7/31.	TL	2/1 to 7/31	0.25 mile
Wildlife-Raptors	Burrowing owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.25 mile
Wildlife-Raptors	Cooper's hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Ferruginous hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/1.	TL	3/1 to 8/1	0.5 mile
Wildlife-Raptors	Flammulated owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 9/30.	TL	4/1 to 9/30	0.25 mile
Wildlife-Raptors	Golden eagle	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 1/1 – 8/31.	TL	1/1 to 8/31	0.5 mile
Wildlife-Raptors	Great horned owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 12/1 – 9/31.	TL	12/1 to 9/31	0.25 mile
Wildlife-Raptors	Long-eared owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 2/1 – 8/15.	TL	2/1 to 8/15	0.25 mile
Wildlife-Raptors	Merlin	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.5 mile
Wildlife-Raptors	Northern goshawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/15.	TL	3/1 to 8/15	0.5 mile
Wildlife-Raptors	Northern harrier	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/15.	TL	4/1 to 8/15	0.5 mile
Wildlife-Raptors	Northern pygmy owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 8/1.	TL	4/1 to 8/1	0.25 mile
Wildlife-Raptors	Northern saw-whet owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.25 mile
Wildlife-Raptors	Osprey	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.5 mile
Wildlife-Raptors	Peregrine falcon	Nests	No surface disturbance within a 1 mile buffer of active nests from 2/1 – 8/31.	TL	2/1 to 8/31	1.0 mile
Wildlife-Raptors	Peregrine falcon	Nests	No surface disturbance within a 1 mile buffer from Feb 1 to August 31.	TL	2/1 to 8/31	1.0 mile
Wildlife-Raptors	Prairie falcon	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.25 mile

Table C.3-19 Price Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Raptors	Red-tailed hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Screech owl, western	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/15.	TL	3/1 to 8/15	0.25 mile
Wildlife-Raptors	Sharp-shinned hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Short-eared owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/1.	TL	3/1 to 8/1	0.25 mile
Wildlife-Raptors	Swainson's hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.5 mile
Wildlife-Raptors	Turkey vulture	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 5/1 – 8/15.	TL	5/1 to 8/15	0.5 mile
Wildlife-SSS	Mexican spotted owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.5 mile
Wildlife-SSS	Sage grouse	Leks	Allow no surface disturbing or otherwise disruptive activities within two miles of a known greater sage-grouse lek from March 15 to July 15 to protect nesting and brood rearing habitat.	TL	3/15 to 7/15	2 miles
Wildlife-SSS	Sage grouse	Winter habitat	Allow no surface disturbing activities or otherwise disruptive activities within greater sage-grouse in winter habitat from December 1 to March 14.		12/1 to 3/14	No buffer

C.3.2.9 Richfield Field Office, Utah

References: Richfield Field Office Record of Decision for the Approved Resource Management Plan, October 2008 (Appendix 6—Wildland Fire Management; Appendix 10—Raptor Best Management Practices; Appendix 11—Oil and Gas Leasing Stipulations and Lease Notices; Appendix 14 — Committed Conservation Measures and Best Management Practices (BMPs) for Federally Listed Species).

Table C.3-20 Richfield Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Cultural Resources		NRHP-listed sites	Manage sites listed on the NRHP as open to leasing with NSO, except as otherwise provided in other management decisions. NSO areas are ROW avoidance areas.	CSU	No buffer
Lands and Realty		Administrative sites	Manage BLM administrative sites as open to leasing with NSO, except as otherwise provided in other management decisions…."All NSO areas are ROW avoidance areas."	CSU	No buffer
Lands and Realty		Cemeteries	Manage all cemeteries as open to leasing with NSO, except as otherwise provided in other management decisions:. "All NSO areas are ROW avoidance areas."	CSU	No buffer
Lands and Realty		Incorporated municipalities	Manage Incorporated municipalities as closed to leasing. All closed areas are ROW exclusion areas.	NSU	No buffer

Table C.3-20 Richfield Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Lands and Realty		Landfills	Manage landfills—existing and closed-as open to leasing with NSO, except as otherwise provided in other management decisions. NSO areas are ROW avoidance areas.	CSU	No buffers
Lands and Realty		R&PP lease areas	Manage lands managed under a R&PP lease as open to leasing with NSO, except as otherwise provided in other management decisions. NSO areas are ROW avoidance areas.	CSU	No buffer
Non-WSA Lands with Wilderness Characteristics		All non WSAs	Manage the following as ROW avoidance areas: a. ACECs; b. Non-WSA lands with wilderness characteristics; c. Areas open to oil and gas leasing with NSO stipulations.	CSU	No buffers
Recreation		Developed Recreation Sites	Manage developed recreation sites as open to leasing with NSO, except as otherwise provided in other management decisions. NSO areas are ROW avoidance areas.	CSU	No buffer
Soils		Erodible, fragile soils and unstable soils	Soils identified by the NRCS as having high potential for wind erosion are to be avoided. If avoidance is impracticable then a plan of operation that addressed erosion control and mitigation will be required.	CSU	No buffer
Soils		Slopes > 30%	Routing through areas with slopes of 30% or greater is to be avoided. If the action cannot be avoided, rerouted, or relocated than a proposed project would include an erosion control strategy, reclamation and a site plan with a detailed survey and design completed by a certified engineer. This proposed project must be approved by the BLM prior to construction and maintenance.	CSU	No buffer
Special Designations-ACEC		All ACECS in FO	Manage the following as ROW avoidance areas: a. ACECs; b. Non-WSA lands with wilderness characteristics; c. Areas open to oil and gas leasing with NSO stipulations.	CSU	No buffer
Vegetation-SSS	Barneby reed-mustard	Occupied habitat	Construction of roads will occur such that the edge of the right of way is at least 300’ from any plant and 300’ from avoidance areas. The edge of the well pad should be located at least 300’ away from plants and avoidance areas, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat. Surface pipelines will be laid such that a 300’ buffer exists between the edge of the right of way and plants and 300’ between the edge of right of way and avoidance areas; use stabilizing and anchoring techniques when the pipeline crosses suitable habitat to ensure pipelines don’t move towards the population; site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat. Roads and utilities should share common right-of-ways where possible. Roads will be graveled within occupied habitat.	CSU	300 feet
Vegetation-SSS	Last Chance townsendia	Occupied habitat	Within occupied habitat, access roads will be graveled.	CSU	No buffer

Table C.3-20 Richfield Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Vegetation-SSS	Maguire daisy	Occupied habitat	Construction of roads will occur such that the edge of the right of way is at least 300' from any plant and 300' from avoidance areas. The edge of the well pad should be located at least 300' away from plants and avoidance areas, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat. Surface pipelines will be laid such that a 300' buffer exists between the edge of the right of way and plants and 300' between the edge of right of way and avoidance areas; use stabilizing and anchoring techniques when the pipeline crosses suitable habitat to ensure pipelines don't move towards the population; site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat. Within occupied habitat, access roads will be graveled.	CSU	300 feet
Vegetation-SSS	San Rafael cactus	Occupied habitat	Buffers of 100 feet minimum between the edge of the right of way (roads and surface pipelines) or surface disturbance (well pads) and plants and populations will be incorporated. Occupied San Rafael cactus habitats within 100' of the edge of the surface pipelines' right-of-ways, 100' of the edge of the roads' right-of-ways, and 100' from the edge of the well pad shall be monitored for a period of three years after ground disturbing activities. Monitoring will include annual plant surveys to determine plant and habitat impacts relative to project facilities. Annual reports shall be provided to the BLM and the Service. To ensure desired results are being achieved, minimization measures will be evaluated and may be changed after a thorough review of the monitoring results and annual reports during annual meetings between the BLM and the Service. Surface pipelines will be laid such that a 100 foot buffer exists between the edge of the right of way and the plants, use stabilizing and anchoring techniques when the pipeline crosses the habitat to ensure the pipelines don't move towards the population.	CSU	100 feet
Vegetation-SSS	Ute ladies'-tresses	Occupied habitat	Buffers of 300 feet minimum between right of way (roads and surface pipelines) or surface disturbance (well pads) and plants and populations will be incorporated. Occupied Ute ladies'-tresses habitats within 300' of the edge of the surface pipelines' right-of-ways, 300' of the edge of the roads' right-of-ways, and 300' from the edge of the well pad shall be monitored for a period of three years after ground disturbing activities. Monitoring will include annual plant surveys to determine plant and habitat impacts relative to project facilities. Habitat impacts include monitoring any changes in hydrology due to project related activities. Annual reports shall be provided to the BLM and the Service. To ensure desired results are being achieved, minimization measures will be evaluated and may be changed after a thorough review of the monitoring results and annual reports during annual meetings between the BLM and the Service. Surface pipelines will be laid such that a 300-foot buffer exists between the edge of the right of way and the plants, using stabilizing and anchoring techniques when the pipeline crosses habitat to ensure the pipelines don't move towards the population.	CSU	300 feet

Table C.3-20 Richfield Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Vegetation-SSS	Winkler pincushion cactus	Occupied habitat	Construction of roads will occur such that the edge of the right of way is at least 300' from any plant and 300' from avoidance areas. The edge of the well pad should be located at least 300' away from plants and avoidance areas, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat. Surface pipelines will be laid such that a 300' buffer exists between the edge of the right of way and plants and 300' between the edge of right of way and avoidance areas; use stabilizing and anchoring techniques when the pipeline crosses suitable habitat to ensure pipelines don't move towards the population; site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat. Within occupied habitat, access roads will be graveled.	CSU	300 feet
Vegetation-SSS	Wright fishhook cactus	Occupied habitat	Construction of roads will occur such that the edge of the right of way is at least 300' from any plant and 300' from avoidance areas. The edge of the well pad should be located at least 300' away from plants and avoidance areas, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat. Surface pipelines will be laid such that a 300' buffer exists between the edge of the right of way and plants and 300' between the edge of right of way and avoidance areas; use stabilizing and anchoring techniques when the pipeline crosses suitable habitat to ensure pipelines don't move towards the population; site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat. Within occupied habitat, access roads will be graveled.	CSU	300 feet
Visual		Existing ROWs	To avoid potential conflicts with the construction, operation, maintenance, and termination of facilities and improvements located on existing ROWs on public land, apply the following: Where a ROW grant specifically identifies an area and/or width, the VRM class within the specified area/width would be VRM Class IV. Where no width is specified, the VRM class within the interior boundaries of the area disturbed when the facility or improvement was initially constructed would be VRM Class IV.	CSU	No buffer
Visual Resources		All VRM classes	All ROWs must comply with the applicable visual resource management (VRM) classification objectives.	CSU	No buffer
Water Resources		Perennial streams; intermittent streams	Prohibit surface disturbing activities within the 100-year floodplain or 330 feet on either side from the centerline, whichever is greater, of streams with intermittent or perennial reaches, resulting in NSO in this area, for protection of habitat for riparian-obligate species.	NSU	300 feet or 100-yr floodplain, whichever greater
Water Resources		Riparian areas	A buffer zone of the 100 year floodplain or 330 feet either side of centerline, whichever is greater, will be maintained around riparian areas (NSO).	NSU	300 feet or 100-yr floodplain, whichever greater
Water Resources		Springs	Maintain buffer zones of no surface disturbance and/or occupancy around natural springs. Base the size of the buffer on hydrological, riparian, and other factors necessary to protect the water quality of the springs. If these factors cannot be determined, maintain a 330-foot buffer zone from outer edge. (Maintain a buffer zone of the 100-year floodplain or 330 feet on either side from the centerline, whichever is greater.)	NSU	300 feet or 100-yr floodplain, whichever greater

Table C.3-20 Richfield Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Water Resources		Wetlands	No surface occupancy on wetland soils or soils identified as having hydric properties. Consider exceptions to NSO if a site-specific environmental analysis determines that other placement alternatives would cause undue or unnecessary degradation to resources. In addition, require the operator to submit a plan prior to commencing operations that addresses: • Erosion control strategies • Mitigation to protect surface from rutting, compaction, and displacement, and disruption of surface and subsurface hydrologic function • Mitigation or restoration measures to restore hydrologic function to site • Proper survey and design by a certified engineer.	NSU	No buffer
Wildlife-Raptors	Bald eagle	Nests	No permanent infrastructure will be placed within 1.0 mile of nest sites.	NSU	1.0 mile
Wildlife-Raptors	Bald eagle	Roosts	No permanent structures are permitted within 0.5 miles of bald eagle winter concentration areas/roosts.	CSU	0.5 mile
Wildlife-Raptors	Bald eagle	Roosts	No permanent infrastructure will be placed within 0.5 miles of winter roost areas.	NSU	0.5 mile
Wildlife-Raptors	California condor	Nests	No permanent infrastructure will be placed within 1.0 mile of nest sites.	NSU	1.0 mile
Wildlife-Raptors	California condor	Roosts	No permanent infrastructure will be placed within 0.5 miles of established roosting sites or areas.	NSU	0.5 mile
Wildlife-SSS	Prairie dog, Utah	Historic and/or occupied Utah prairie dog colonies	Project related vehicle maintenance activities will be conducted in maintenance facilities. Should it become necessary to perform vehicle or equipment maintenance on-site, these activities will avoid identified Utah prairie dog colonies or within a 350-foot distance from colonies. Precautions shall be taken to ensure that contamination of maintenance sites by fuels, motor oils, grease, etc. does not occur and such materials are contained and properly disposed of off-site. Inadvertent spills of petroleum based or other toxic materials shall be cleaned up and removed immediately.	CSU	350 feet
Wildlife-SSS	Prairie dog, Utah	Historic and/or occupied Utah prairie dog habitat	Permanent surface disturbance or facilities will be avoided within 0.5 mile of potentially suitable, unoccupied prairie dog habitat, identified and mapped by Utah Division of Wildlife Resources since 1976. Within occupied habitat, a 25 mph speed limit will be set.	CSU	0.5 mile
Wildlife-SSS	Prairie dog, Utah	Historic and/or occupied Utah prairie dog habitat	Surface occupancy or other surface disturbing activity will be avoided within 0.5 mile of active prairie dog colonies.	CSU	0.5 mile
Wildlife-SSS	Sage grouse	Leks	Surface disturbing activities would be limited to a year-round, 0.5 mile NSO around Greater sage-grouse leks.	NSU	0.5 mile
Wildlife-SSS	Southwestern willow flycatcher	Suitable riparian habitats	Drilling activities will maintain a 300 ft. buffer from suitable riparian habitat year long.	NSU	300 foot
Wildlife-SSS	Southwestern willow flycatcher	Suitable riparian habitats	No surface disturbing activities within 0.25 miles of suitable Southwestern willow flycatcher riparian habitat.	NSU	0.25 mile
Wildlife-SSS	Southwestern willow flycatcher	Suitable riparian habitats	Permanent surface disturbances should be avoided within 0.5 mile of suitable Southwestern willow flycatcher habitat.	CSU	0.5 mile

Table C.3-21 Richfield Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Vegetation-SSS	Barneby reed-mustard	Occupied habitat	Within occupied habitat, construction activities will not occur between 4/15 – 6/5. Within occupied habitat, access roads will be graveled and dust abatement (watering) is encouraged from 4/15 – 6/5.	TL, CSU	4/15 to 6/15	No buffer
Vegetation-SSS	Last Chance townsendia	Occupied habitat	Within occupied habitat, construction activities will not occur between 4/15 – 6/30. Within occupied habitat, dust abatement (watering) is encouraged from 4/15 – 6/30.	TL	4/15 to 6/30	No buffer
Vegetation-SSS	Maguire daisy	Occupied habitat	Within occupied habitat, construction activities will not occur between 5/1 – 6/30. Within occupied habitat, dust abatement (watering) is encouraged from 5/1 – 6/30.	TL	5/1 to 6/30	No buffer
Vegetation-SSS	Winkler pincushion cactus	Occupied habitat	Within occupied habitat, construction activities will not occur between 3/15 – 6/1. Within occupied habitat, dust abatement (watering) is encouraged from 3/15 – 6/1.	TL	3/1 to 6/1	No buffer
Vegetation-SSS	Wright fishhook cactus	Occupied habitat	Within occupied habitat, construction activities will not occur between 4/15 – 6/15. Within occupied habitat, dust abatement (watering) is encouraged from 4/1 – 6/15.	TL	4/15 to 6/15	No buffer
Wildlife-Big Game	All	Winter range, crucial	Surface disturbing activities are restricted in crucial winter habitat from December 15 through April 15.	TL	12/15 to 4/15	No buffer
Wildlife-Raptors	Bald eagle	Nests	No surface disturbance within a 1 mile buffer of active nests from 1/1 – 8/31. Temporary activities or habitat alterations that could disturb nesting bald eagles are restricted from 1/1 – 8/31 within 1 miles of nest sites, unless the area has been surveyed according to protocol and determined to be unoccupied.	TL	1/1 to 8/31	1.0 mile
Wildlife-Raptors	Bald eagle	Roosts	Temporary activities within 0.5 miles of winter roost areas, e.g., cottonwood galleries, will not occur during the winter roost season of November 1 to March 31, unless the area has been surveyed according to protocol and determined to be unoccupied. In addition, require daily activities approved through subsequent consultation within these spatial buffers to start after 9 a.m. and terminate at least 1 hour before sunset to ensure that bald eagles using these roosts have the opportunity to vacate their roost in the morning and return undisturbed in the evening.	TL	11/1 to 3/31	0.5 mile
Wildlife-Raptors	Boreal owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 2/1 – 7/31.	TL	2/1 to 7/31	0.25 mile
Wildlife-Raptors	Burrowing owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.25 mile
Wildlife-Raptors	California condor	Nests	Temporary activities within 1.0 mile of nest sites will not occur during the breeding season.	TL	breeding season (undefined)	1.0 mile
Wildlife-Raptors	California condor	Roosts	Temporary activities within 0.5 miles of established occupied roosting sites or areas will not occur between 8/1 – 11/31.		8/1 – 11/31	0.5 mile
Wildlife-Raptors	Cooper's hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Ferruginous hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/1.	TL	3/1 to 8/1	0.5 mile
Wildlife-Raptors	Flammulated owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 9/30.	TL	4/1 to 9/30	0.25 mile

Table C.3-21 Richfield Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Raptors	Golden eagle	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 1/1 – 8/31.	TL	1/1 to 8/31	0.5 mile
Wildlife-Raptors	Great horned owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 12/1 – 9/31.	TL	12/1 to 9/31	0.25 mile
Wildlife-Raptors	Long-eared owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 2/1 – 8/15.	TL	2/1 to 8/15	0.25 mile
Wildlife-Raptors	Merlin	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.5 mile
Wildlife-Raptors	Northern goshawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/15.	TL	3/1 to 8/15	0.5 mile
Wildlife-Raptors	Northern harrier	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/15.	TL	4/1 to 8/15	0.5 mile
Wildlife-Raptors	Northern pygmy owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 8/1.	TL	4/1 to 8/1	0.25 mile
Wildlife-Raptors	Northern saw-whet owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.25 mile
Wildlife-Raptors	Osprey	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.5 mile
Wildlife-Raptors	Peregrine falcon	Nests	No surface disturbance within a 1 mile buffer of active nests from 2/1 – 8/31.	TL	2/1 to 8/31	1.0 mile
Wildlife-Raptors	Prairie falcon	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.25 mile
Wildlife-Raptors	Red-tailed hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Screech owl, western	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/15.	TL	3/1 to 8/15	0.25 mile
Wildlife-Raptors	Sharp-shinned hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Short-eared owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/1.	TL	3/1 to 8/1	0.25 mile
Wildlife-Raptors	Swainson's hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.5 mile
Wildlife-Raptors	Turkey vulture	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 5/1 – 8/15.	TL	5/1 to 8/15	0.5 mile
Wildlife-SSS	Mexican spotted owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.25 mile
Wildlife-SSS	Prairie dog, Utah	Historic and/or occupied Utah prairie dog habitat	Unavoidable surface disturbing activities in Utah prairie dog habitat should be conducted between April 1 and September 30 (the period when prairie dogs are most likely to be found above ground). BLM projects will be designed to avoid direct disturbance to Utah prairie dog populations and habitat wherever possible. Designs should consider flow of water, slope, buffers, possible fencing, and pre-activity flagging of critical areas for avoidance.	TL	4/1 to 9/30	No buffer
Wildlife-SSS	Sage grouse	Leks	Surface or other disruptive activities are not allowed within 2 miles of leks between March 15 – July 15.	TL	3/15 to 7/15	2 miles
Wildlife-SSS	Sage grouse	Winter habitat	Surface or other disruptive activities are not allowed within winter habitat between 12/15 – 3/14.	TL	12/15 to 3/14	No buffer

Table C.3-21 Richfield Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-SSS	Southwestern willow flycatcher	Suitable habitat	No surface disturbing activities within 0.25 miles of suitable Southwestern willow flycatcher breeding habitat from 5/1 – 8/15. Unavoidable ground disturbing activities in occupied Southwestern willow flycatcher habitat should only be conducted when preceded by current year survey, should only occur between August 16 and April 30 (the period when Southwestern willow flycatcher are not likely to be breeding), and should be monitored to ensure that adverse impacts to Southwestern willow flycatcher are minimized or avoided, and to document the success of project specific mitigation/protection measures.	TL, CSU	5/1 to 8/15	0.25 mile

C.3.2.10 Salt Lake Field Office, Utah

References: Record of Decision for the Pony Express Resource Management Plan and Rangeland Program Summary for Utah County, January 1990 (Utility Corridor, Wildlife, Mineral Leasing, and Fluid Leasing stipulations).

Table C.3-22 Salt Lake Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Hazardous Materials		Lands with known or suspected hazardous materials	Rights-of-way, whether within or outside a corridor, will avoid lands with known or suspected hazardous materials.	CSU	No buffer
Lands and Realty		ROW corridors	Future proposals for major rights-of-way such as pipelines, large power lines and permanent improved roads must utilize identified corridors as shown in Figure 10. Otherwise, a planning amendment and appropriate environmental analysis will be required.	NSU	No buffer
Soils		Slopes > 30%	Rights-of-way, whether within or outside a corridor, will avoid lands with slopes greater than 30 percent. Surface disturbing activities will be allowed in fragile soils on Slopes >35% only after an engineered soils derived construction/reclamation plan is submitted by the operator and approved by the Area Manager.	CSU	
Visual		Ridge tops, narrow drainages	Rights-of-way, whether within or outside a corridor, will avoid lands where an above-ground right-of-way would be an obvious visual or physical intrusion such as ridge tops or narrow drainages.	CSU	No buffer
Visual		VRM Class II and III areas within Salt Lake FO	Rights-of-way, whether within or outside a corridor, will avoid lands within VRM Class II and III areas.	CSU	No buffer
Water Resources		Riparian areas	BLM will protect important wildlife habitat values from disturbing activities by restricting seismic work, well development, new road construction, rights-of-way, organized recreational activities, military exercises, and other disturbing activities excluding maintenance activities from within 1,200 feet of riparian habitats. Rights-of-way, whether within or outside a corridor, will avoid lands within 1200 feet of riparian/aquatic habitats.	CSU	1,200 feet

Table C.3-22 Salt Lake Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Wildlife-SSS	Sage grouse	Leks	Rights-of-way, whether within or outside a corridor, will avoid lands within 0.5 mile of sage grouse strutting grounds if the disturbance would adversely impact the effectiveness of the lek.	NSU	0.5 mile
Wildlife-Big Game	Big horn sheep	Crucial winter and lambing areas	BLM will protect important wildlife habitat values from disturbing activities by restricting seismic work, well development, new road construction, rights-of-way, organized recreational activities, military exercises, and other disturbing activities excluding maintenance activities from within bighorn sheep crucial winter and lambing areas. Once these ranges have been established by the reintroduced animals, appropriate dates and crucial habitats will be delineated.	CSU	No buffer
Wildlife-Waterfowl	Waterfowl	Marsh and wetlands areas	BLM will protect important wildlife habitat values from disturbing activities by restricting seismic work, well development, new road construction, rights-of-way, organized recreational activities, military exercises, and other disturbing activities excluding maintenance activities in the following areas within waterfowl habitat, i.e. marsh and wetland areas.	CSU	No buffer

Table C.3-23 Salt Lake FO Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Big Game	Elk	Winter range, crucial	BLM will protect important wildlife habitat values from disturbing activities by restricting seismic work, well development, new road construction, rights-of-way, organized recreational activities, military exercises, and other disturbing activities excluding maintenance activities within crucial elk winter range December 1 to April 30.	TL	12/1 to 4/30	Wildlife-Big Game
Wildlife-Big Game	Mule deer	Winter range	BLM will protect important wildlife habitat values from disturbing activities by restricting seismic work, well development, new road construction, rights-of-way, organized recreational activities, military exercises, and other disturbing activities excluding maintenance activities within mule deer winter range December 1 to April 15.	TL	12/1 to 4/15	Wildlife-Big Game
Wildlife-Big Game	Elk	Parturition areas	BLM will protect important wildlife habitat values from disturbing activities by restricting seismic work, well development, new road construction, rights-of-way, organized recreational activities, military exercises, and other disturbing activities excluding maintenance activities within elk calving areas May 1 to June 30.	TL	5/1 to 6/30	Wildlife-Big Game
Wildlife-Big Game	Mule deer	Parturition areas	BLM will protect important wildlife habitat values from disturbing activities by restricting seismic work, well development, new road construction, rights-of-way, organized recreational activities, military exercises, and other disturbing activities excluding maintenance activities within crucial mule deer summer/fawning habitats from April 15 to July 31.	TL	4/15 to 7/31	Wildlife-Big Game
Wildlife-Big Game	Pronghorn	Parturition areas	BLM will protect important wildlife habitat values from disturbing activities by restricting seismic work, well development, new road construction, rights-of-way, organized recreational activities, military exercises, and other disturbing activities excluding maintenance activities within antelope fawning areas from April 15 to July 1.	TL	4/15 to 7/1	Wildlife-Big Game
Wildlife-Raptors	All	Nests	BLM will protect important wildlife habitat values from disturbing activities by restricting seismic work, well development, new road construction, rights-of-way, organized recreational activities, military exercises, and other disturbing activities excluding maintenance activities within 0.5 mile of active raptor nest sites between March I to July 15.	TL	3/1 to 7/15	Wildlife-Raptors

Table C.3-23 Salt Lake FO Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Raptors	Bald eagle	Roosts	BLM will protect important wildlife habitat values from disturbing activities by restricting seismic work, well development, new road construction, rights-of-way, organized recreational activities, military exercises, and other disturbing activities excluding maintenance activities within .5 mile radius of the roosts sites from November 15 to March 15.	TL	11/15 to 3/15	Wildlife-Raptors
Wildlife-SSS	Sage grouse	Leks and crucial nesting habitat	BLM will protect important wildlife habitat values from disturbing activities by restricting seismic work, well development, new road construction, rights-of-way, organized recreational activities, military exercises, and other disturbing activities excluding maintenance activities within 0.5 mile of sage grouse strutting grounds (leks) and crucial sage grouse nesting habitat between February 15 and June 15 each year.	TL	2/15 to 6/15	Wildlife-SSS
Wildlife-SSS	Sage grouse	Winter crucial habitat	BLM will protect important wildlife habitat values from disturbing activities by restricting seismic work, well development, new road construction, rights-of-way, organized recreational activities, military exercises, and other disturbing activities excluding maintenance activities within winter crucial habitat areas December 1 through March 1.	TL	12/1 to 3/1	Wildlife-SSS

C.3.2.11 Fillmore Field Office, Utah

References: Warm Springs Resource Area Resource Management Plan and Record of Decision, April 1987 (Management Decision by Resource), Wildlife and Recreations sections; Table 2-11; House Range Resource Area Resource Management Plan and Record of Decision, October 1987 (Management Decision by Resource).

Table C.3-24 Fillmore Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Lands and Realty		Sigurd to Nevada, IPP to NV, and IPP to CA transmission corridors	Rights-of-way will be processed on a case-by-case basis, generally in the order received. Existing major rights-of-way are designated as corridors. New rights of- way will be restricted to these corridors wherever feasible. Existing transmission line access roads shall be used, and only the roads to new tower sites shall be constructed for new ROWs. Transmission lines ROWs shall be adjacent to each other or as close as possible.	CSU	No buffer
Lands and Realty		Highway 50, 6, and 257 ROW corridor	All land disturbed by new ROW except authorized new access roads shall be rehabilitated to as close to natural conditions as possible, All rights-of-way must comply with the applicable Visual Resource Management Class guidelines. Roads that are needed for construction of a new ROW shall be temporary and fully rehabilitated. The road or highway within the right-of-way corridor shall be used to the maximum extent possible for construction and maintenance of new ROWs.	CSU	No buffer
Lands and Realty		Interstate Highway 15 ROW corridor	All rights-of-way must comply with the applicable Visual Resource Management Class guidelines. New rights of way shall be limited to below the surface of the ground uses only.	CSU	No buffer
Lands and Realty		ROW corridors	Existing transmission line access roads shall be used and only roads to new tower sites shall be constructed for new rights-of-way.	CSU	No buffer
Lands and Realty		ROW corridors	Transmission line rights-of-way shall be adjacent or located as close together as possible.	CSU	No buffer

Table C.3-24 Fillmore Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Special Designations		All SDAs	All Special management designation areas in this FO are right-of-way avoidance areas.	CSU	No buffer
Visual Resources		VRM II areas	VRM Class II areas [within the Warm Springs Resource Area] are right-of-way avoidance areas.	CSU	No buffer
Wildlife-SSS	Sage grouse	Leks	OHV use restricted within a 2 mile buffer around established lek sites from March 1 to July 31.	CSU, TL (3/1 to 7/31)	2 miles
Wildlife-SSS	Sage grouse	Leks	There is a 2 mile buffer around established lek sites where sagebrush manipulation is prohibited.	CSU	2 miles

Table C.3-25 Fillmore Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Raptors	Raptor management will be guided by the use of "Best Management Practices for Raptors and Their Associated Habitats in Utah" (Utah BLM, 2006, Appendix A), utilizing seasonal and spatial buffers, as well as mitigation, to maintain and enhance raptor nesting and foraging habitat, while allowing other resource uses. Spatial and temporal buffers applied to disturbances in the vicinity of nesting raptors will be tailored to the individual raptor species involved and based on factors such as line of sight distance between nest and disturbance, type and duration of disturbance, nest structure security, sensitivity of the species to disturbance, observed responses to related disturbances, and the amount of other disturbances already occurring in the vicinity. Land use activities which would have an adverse impact on an occupied raptor nest, would not be allowed within the spatial or seasonal buffer.					
Wildlife-Raptors	Bald eagle	Nests	No surface disturbance within a 1-mile buffer of active nests from 1/1 – 8/31	TL	1/1 to 8/31	1.0 mile
Wildlife-Raptors	Boreal owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 2/1 – 7/31.	TL	2/1 to 7/31	0.25 mile
Wildlife-Raptors	Burrowing owl	Nests	No surface disturbance or occupancy within a 0.25 mile buffer of active nests during breeding/nesting season (from 3/1 – 8/31).	TL	3/1 to 8/31	0.25 mile
Wildlife-Raptors	California condor	Nests	Temporary activities will not occur within 1.0 mile of occupied nest sites during breeding season. A temporary action is completed prior to the following important season of use, leaving for habitat functionality.	TL	Breeding season (undefined)	1.0 mile
Wildlife-Raptors	Cooper's hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Ferruginous hawk	Nests	No surface disturbance or occupancy within a 0.5 mile buffer of active nests during breeding/nesting season (from 3/1 – 8/1).	TL	3/1 to 8/1	0.5 mile
Wildlife-Raptors	Flammulated owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 9/30.	TL	4/1 to 9/30	0.25 mile
Wildlife-Raptors	Golden eagle	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 1/1 – 8/31.	TL	1/1 to 8/31	0.5 mile
Wildlife-Raptors	Great horned owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 12/1 – 9/30.	TL	12/1 to 9/30	0.25 mile
Wildlife-Raptors	Long-eared owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 2/1 – 8/15.	TL	2/1 to 8/15	0.25 mile
Wildlife-Raptors	Merlin	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.5 mile
Wildlife-Raptors	Mexican spotted owl	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.5 mile

Table C.3-25 Fillmore Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Raptors	Northern goshawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/15.	TL	3/1 to 8/15	0.5 mile
Wildlife-Raptors	Northern harrier	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/15.	TL	4/1 to 8/15	0.5 mile
Wildlife-Raptors	Northern pygmy owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 8/1.	TL	4/1 to 8/1	0.25 mile
Wildlife-Raptors	Northern saw-whet owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.25 mile
Wildlife-Raptors	Osprey	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.5 mile
Wildlife-Raptors	Peregrine falcon	Nests	No surface disturbance within a 1 mile buffer of active nests from 2/1 – 8/31.	TL	2/1 to 8/31	1.0 mile
Wildlife-Raptors	Prairie falcon	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.25 mile
Wildlife-Raptors	Red-tailed hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/15.	TL	3/15 to 8/15	0.5 mile
Wildlife-Raptors	Screech owl, western	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/15.	TL	3/1 to 8/15	0.25 mile
Wildlife-Raptors	Sharp-shinned hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Short-eared owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/1.	TL	3/1 to 8/1	0.25 mile
Wildlife-Raptors	Swainson's hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.5 mile
Wildlife-Raptors	Turkey vulture	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 5/1 – 8/15.	TL	5/1 to 8/15	0.5 mile

Note: As a result of apparent high population densities and ability to adapt to human activity, a spatial buffer is currently considered not necessary (NN) for maintenance of American kestrel or common barn owl populations. Actions resulting in direct mortality of individual birds and "take" of known nest sites are unlawful.

C.3.2.12 Cedar City Field Office, Utah

References: Pinyon MFP, 1997 Amendment, page 195 (Management Decision by Resource); Beaver, Cedar, Garfield, Antimony ROD/RMP 1986.

Table C.3-26 Cedar City Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Lands and Realty		ROW avoidance/exclusion areas	Rights-of-way will not be authorized in Category 3 (NSO) or 4 (withdrawn or No lease) oil and gas designation areas.	NSU	No buffer
Water Resources		Municipal/culinary/public water/reservoirs/wells	Within a designated corridor, blasting and other surface disturbances would be prohibited within 500 feet of reservoirs or water wells.	NSU	500 feet
Water Resources		Springs	Within a designated corridor, blasting and other surface disturbances would be prohibited within 500 feet of all live springs.	NSU	500 feet

Table C.3-26 Cedar City Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Water/Soils		Stream channels, areas of unstable soils, and seeps	Construct roads to avoid stream channels, areas of unstable soils, and seeps. Avoid constructing long, down slope straightaways, providing instead curves with water drainages off the road bed.	CSU	No buffer
Wildlife-multiple species		Deer habitat, prairie dog, sage grouse, bald & golden eagle dens, burrows, nests, and roosting sites.	Following the advice of a qualified wildlife biologist as designated by the appropriate federal official, roads, railroads, towers, and other ground disturbing activities would be located 200 yards from identified active dens, burrows, nests, or roosting sites to protect deer, Utah prairie dog, bald and golden eagles, and sage grouse.	NSU	200 yards (600 feet)
Wildlife-SSS	Prairie dog, white-tailed	Prairie dog towns	Prairie dogs require Category 3 protection of no occupancy or drilling within prairie dog towns.	CSU	No buffer

Table C.3-27 Cedar City Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Big Game	Mule deer	Sigurd to Paragonah transmission corridor crucial winter range	During Jan 1 to April 30 within the Sigurd to Paragonah transmission line corridor, transmission line construction would cease along the transmission lines. Transmission line construction would cease along the transmission lines to protect mule deer crucial winter range.	TL	1/1 to 4/30	No buffer
Wildlife-Raptors	Bald/golden eagles	Paragonah to St. George transmission corridor golden eagle roost sites	During Feb 15 to June 30 within Paragonah to St. George transmission line construction would cease along the transmission lines to protect bald and golden eagle roost sites.	TL	2/15 to 6/30	No buffer
Wildlife-Raptors	All raptors	Nests	Raptors are protected during their nesting season by a special stipulation which requires no drilling or exploration around nest sites from February 15 through June 30.	TL	2/15 to 6/31	No buffer
Wildlife-Raptors	All raptors	Nests	In order to protect important raptor nesting areas, exploration, drilling, and other development activity will be allowed only during the period from July 1 to February 14. TL-Feb 15 to June 30.	TL	2/15 to 6/30	No buffer
Wildlife-SSS	Sage grouse	Leks	Sage grouse mating is protected by special stipulation prohibiting drilling or exploration on strutting grounds from March 1 through May 15.	TL	3/1 to 5/15	No buffer
Wildlife-SSS	Sage grouse	Sage grouse – Pinyon Planning Unit	In order to protect important sage grouse strutting and nesting areas, exploration, drilling, and other development activity will be allowed only during the period from May 16 to February 28. TL from 3/1 to 5/15.	TL	5/16 to 2/28	No buffer
Wildlife-SSS	Sage grouse	Sigurd to Paragonah transmission corridor strutting grounds	During March 15 to May 1 within the Sigurd to Paragonah transmission line corridor, transmission line construction would cease along the transmission lines to protect sage grouse strutting areas.	TL	3/15 to 5/1	No buffer

C.3.2.13 Saint George Field Office, Utah

References: St. George Field Office Record of Decision and Resource Management Plan, March 1999 (Chapter 2, Management Decision by Resource; Appendix 4—U.S. Fish and Wildlife Service Terms and Conditions for Authorized Activities within Desert Tortoise Habitat).

Table C.3-28 Saint George Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Special Designations-ACEC	Desert tortoise	Beaver Dam Slope ACEC	The Bureau shall strongly discourage new rights-of-way and temporary use permits within the Beaver Dam Slope ACEC and the Upper Virgin River DWMA; such rights-of-way and temporary use permits within the DWMA or ACEC shall only be authorized if no reasonable alternative exists and impacts to tortoises and their habitat can be mitigated. Surface disturbance (before restoration) resulting from all new rights-of-ways and temporary use permits in the DWMAs/ACECs shall not exceed 40 acres through the life of the project In DWMAs/ACECs, vehicles associated with Bureau-authorized projects traveling on unpaved roads in desert tortoise habitat shall not exceed speed limits established by the Bureau as necessary to protect desert tortoises. These speed limits will generally not exceed 40 mph even on the best unpaved roads, but may be much less than this on some roads. In regard to new rights-of-way within the Beaver Dam Slope ACEC and the Upper Virgin River DWMA, such rights-of-way shall be routed away from high-density tortoise populations, and along the edges of DWMAs/ACECs. Linear right-of-ways shall be placed adjacent or parallel to existing rights-of-way and share vehicular access. Utilities shall be co-located with other utility projects whenever feasible. No new paved roads shall be authorized in the DWMA or ACEC. Temporary upgrading of existing roads and construction of new unpaved roads in the DWMA or ACEC could be authorized only if positive benefits to tortoise management occur. Concurrence from the Service that positive benefits would accrue is required prior to authorizing new roads in DWMAs/ACECs.	CSU	No buffer
Wildlife-SSS	All	T&E and candidate species habitat	T&E and Candidate Species Habitat are Rights-of-Way avoidance areas (subject to designated corridors). New rights-of-way will be granted in these areas only when feasible alternative routes or designated corridors are not available.	CSU	No buffer
Water Resources		Riparian areas	Riparian Areas are Rights-of-Way avoidance areas (subject to designated corridors).	CSU	No buffer
Wildlife-SSS		Desert tortoise habitat	Outside of the HCP Reserve and the Beaver Dam Slope ACEC, tortoise habitat now designated as critical will be protected by designating such habitats as right-of-way avoidance areas (outside of utility corridors).	CSU	No buffer
Travel		OHV closed areas	OHV Closed Areas are Rights-of-Way avoidance areas (subject to designated corridors). New rights-of-way will be granted in these areas only when feasible alternative routes or designated corridors are not available.	CSU	No buffer
Travel		OHV designated roads & trails areas	OHV Designated Roads & Trails Areas are Rights-of-Way avoidance areas (subject to designated corridors). New rights-of-way will be granted in these areas only when feasible alternative routes or designated corridors are not available.	CSU	No buffer
Visual Resources		VRM Class I and II areas	VRM Class I and II areas are Rights-of-Way avoidance areas (subject to designated corridors). New rights-of-way will be granted in these areas only when feasible alternative routes or designated corridors are not available.	CSU	No buffer

Table C.3-29 Saint George Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife- Big Game	Elk	Parturition areas	Elk calving areas will be closed for the same reason from May 1 to July 30. These seasonal use restrictions will also be applied to mineral materials sales, forest product sales, and rights-of-way construction.	TL	5/1 to 7/30	No buffer
Wildlife- Big Game	Mule deer	Winter range	Crucial mule deer winter range will be protected from the potential effects of fluid mineral leasing with a Category 2 seasonal stipulation to close the lands to exploration or development from November 1 to April 15. Elk calving areas will be closed for the same reason from May 1 to July 30. These seasonal use restrictions will also be applied to mineral materials sales, forest product sales, and rights-of-way construction.	TL	11/1 to 4/15	No buffer
Wildlife-Raptors	Golden eagle	Nests	Fluid mineral leasing Category 2 seasonal stipulation will be applied to a 0.5 mile area around known active nest sites closing the lands to exploration and drilling for the following species: golden eagle (February 1 to June 30). These seasonal restrictions will also be applied to all authorizations for fuelwood permits, mineral materials sales, construction activity, and competitive recreation permits issued for the lands involved.	TL	2/1 to 6/30	0.5 mile
Wildlife-Raptors	Peregrine falcon	Nests	fluid mineral leasing Category 2 seasonal stipulation will be applied to a 0.5 mile area around known active nest sites closing the lands to exploration and drilling for the peregrine falcon (March 15 to June 30). These seasonal restrictions will also be applied to all authorizations for fuelwood permits, mineral materials sales, construction activity, and competitive recreation permits issued for the lands involved.	TL	3/15 to 6/30	0.5 mile
Wildlife-SSS	Desert tortoise	Habitat	To the extent possible, project activities shall be scheduled when tortoises are inactive (October 15 through March 15). The following project activities shall only occur from October 15 through March 15: surface disturbance associated with mineral leasing; organized, non-speed vehicular events in the DWMA and/or ACEC; construction and nonemergency maintenance activities in rights-of- ways; and non-emergency maintenance of existing roads. During the tortoise active season (March 15 through October 15), project features that might trap or entangle desert tortoises such as open trenches, pits, open pipes, etc., shall be covered or modified to prevent entrapment.	TL, CSU	3/16 to 10/14	No buffer
Wildlife-SSS	Mexican spotted owl	Nests	fluid mineral leasing Category 2 seasonal stipulation will be applied to a 0.5 mile area around known active nest sites closing the lands to exploration and drilling for the Mexican spotted owl (February 1 to August 31). These seasonal restrictions will also be applied to all authorizations for fuelwood permits, mineral materials sales, construction activity, and competitive recreation permits issued for the lands involved. The bald eagle winters but does not nest in this area.	TL	2/1 to 8/31	0.5 mile
Wildlife-SSS	Southwestern willow flycatcher	Known active nests	Where known active nest sites are located on public lands, BLM will implement seasonal closures for the period of April 1 to August 30 within 0.5 mile of nests for discretionary permits authorizing construction or other disruptive activity.	TL	4/1 to 8/30	0.5 mile

C.3.2.14 Ely District/Caliente Field Office, Utah

References: Ely District Record of Decision and Approved Resource Management Plan, August 2008 (Chapter 2, Alternatives, page 2.4-52; Appendix A—Resource Program Best Management Practices, page A1-8), Wildlife section; Clark County Conservation of Public Land and Natural Resources Act of 2002 (Public Law 107-282-Nov. 6, 2002), Title II; Wilderness Act of 1964.

Table C.3-30 Ely Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Geology (Karst)		Caves	Ground disturbing activities are not allowed within 100 yards (horizontally or vertically) of known cave resources including entrances, drainage areas, subsurface passages, and developed recreation sites.	NSU	300 feet
Wildlife-SSS	Sage grouse	Leks	Outside of designated corridors, above-ground facilities will not be constructed within 0.25 mile of greater sage-grouse leks. Underground facilities will not be installed within 0.25 mile of greater sage-grouse leks unless the vegetation can be established to pre-disturbance conditions within a reasonable period of time. No new roads will be constructed within 0.25 mile of greater sage-grouse leks. Exceptions may be granted by the authorized officer, in consultation with Nevada Department of Wildlife, if the project can be designed so that it will not affect breeding activity nor degrade the integrity of the habitat associated with the lek, or if the lek has been inactive for at least 5 consecutive years or the habitat has changed such that there is no likelihood that the lek will become active.	NSU, CSU	0.25 mile
Special Designations-ACEC		Kane Springs ACEC	Limited/avoidance/exclusion area. [Limited = Rights-of-way; limit authorization of future communication sites to existing established rights-of-way unless technically unfeasible and encourage use of existing corridors for all future rights-of-way when possible. Avoidance= Avoidance area; granting rights-of-way (surface, subsurface, aerial) within the area will be avoided, but rights-of-way may be granted if there is minimal conflict with identified resource values and impacts can be mitigated.]. In general, proposed ACECs are Rights-of-Way avoidance areas (subject to designated corridors). New rights-of-way will be granted in these areas only when feasible alternative routes or designated corridors are not available. Manage rights-of-way in desert tortoise habitat the same as that described for the Beaver Dam Slope, Kane Springs, and Mormon Mesa ACECs.	CSU	No buffer
Special Designations-ACEC		Beaver Dam Slope ACEC	Limited Rights-of-way area. Limited: Rights-of-way; limit authorization of future communication sites to existing established rights-of-way unless technically unfeasible and encourage use of existing corridors for all future rights-of-way when possible. Avoidance: Avoidance area; granting rights-of-way (surface, subsurface, aerial) within the area will be avoided, but rights-of-way may be granted if there is minimal conflict with identified resource values and impacts can be mitigated . In general, proposed ACECs are Rights-of-Way avoidance areas (subject to designated corridors). New rights-of-way will be granted in these areas only when feasible alternative routes or designated corridors are not available. Manage rights-of-way in desert tortoise habitat the same as that described for the Beaver Dam Slope, Kane Springs, and Mormon Mesa ACECs.	CSU	No buffer

Table C.3-30 Ely Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Special Designations-ACEC		Mormon Mesa ACEC	Limited/avoidance/exclusion area: Limited: Rights-of-way; limit authorization of future communication sites to existing established rights-of-way unless technically unfeasible and encourage use of existing corridors for all future rights-of-way when possible. Avoidance: Avoidance area; granting rights-of-way (surface, subsurface, aerial) within the area will be avoided, but rights-of-way may be granted if there is minimal conflict with identified resource values and impacts can be mitigated. Manage rights-of-way in desert tortoise habitat the same as that described for the Beaver Dam Slope, Kane Springs, and Mormon Mesa ACECs.	CSU	No buffer
Special Designations-Wilderness Areas	Delamar Mountains Wilderness Area	All wilderness areas	Clover Mountain and Delamar Mountains Wilderness areas are designated ROW exclusion areas.	NSU	No buffer
Special Designations-Wilderness Areas	Clover Mountain wilderness Area	All wilderness areas	Clover Mountain and Delamar Mountains Wilderness areas are designated ROW exclusion areas.	NSU	No buffer

Table C.3-31 Ely Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Big Game	All	Parturition areas	Where appropriate, restrict permitted activities in big game calving/fawning/kidding/lambing grounds and crucial summer range from April 15 through June 30.	TL	4/15 to 6/30	No buffer
Wildlife-Big Game	All	Winter habitat, crucial	Where appropriate, restrict permitted activities in crucial winter range from November 1 through March 31.	TL	11/1 to 3/31	No buffer
Wildlife-Big Game	Big horn sheep	Occupied habitat	Where appropriate, restrict permitted activities within occupied desert bighorn sheep habitat from March 1 through May 31 and from July 1 through August 31.	TL	3/1 to 5/31	No buffer
Wildlife-Big Game	Big horn sheep	Occupied habitat	Where appropriate, restrict permitted activities within occupied desert bighorn sheep habitat from March 1 through May 31 and from July 1 through August 31.	TL	7/1 to 8/31	No buffer
Wildlife-Raptors	Raptors	Nests	Where appropriate, restrict permitted activities from May 1 through July 15 within 0.5 mile of raptor nest sites unless the nest site has been determined to be inactive for at least the previous 5 years.	TL	6/1 to 7/15	0.5 mile
Wildlife-SSS	Desert tortoise	Habitat	Where appropriate, restrict permitted activities from March 1 through October 31 within desert tortoise habitat.	TL	3/1 to 10/31	No buffer
Wildlife-SSS	Sage grouse	Leks	Where appropriate, restrict permitted activities in all occupied ranges from 3/1 – 5/15 within 2 miles of active leks.	TL	3/1 to 5/15	2 miles

Table C.3-31 Ely Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-SSS	Sage grouse	Winter range	Where appropriate, restrict permitted activities from 11/1 – 3/31 within GSG winter range.	TL	11/1 to 3/31	No buffer

C.3.2.15 Las Vegas Field Office, Utah

References: Record of Decision for the Approved Las Vegas Resource Management Plan and FEIS, October 1998 (Management Decisions by Resource); Clark County Conservation of Public Land and Natural Resources Act Of 2002 (Public Law 107-282-Nov. 6, 2002), Title II; Wilderness Act of 1964.

Table C.3-32 Las Vegas Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Special Designations-ISA		Sunrise ISA	No rights-of-way could be authorized within the Sunrise Instant Study Area, unless it is released from further wilderness consideration. There is a corridor 1,400 feet wide from the north side of the Sunrise Instant Study Area south through Rainbow Gardens to the Lake Mead crossover. This corridor is described as west of the east boundary of the IPP-McCullough powerlines. Activation and use of this corridor is contingent upon Congressional action releasing the Instant Study Area from further wilderness consideration and study.	NSU	No buffer
Special Designations-Wilderness Areas.		Arrow Canyon Wilderness Area	There shall be no commercial enterprise and no permanent road within any wilderness area designated. There shall be no temporary road. No use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area. Motorized equipment and equipment used for mechanical transport are generally prohibited on all federal lands designated as wilderness.	NSU	No buffer
Special Designations-Wilderness Areas.		Black Mountain Wilderness Area	There shall be no commercial enterprise and no permanent road within any wilderness area designated. There shall be no temporary road. No use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area. Motorized equipment and equipment used for mechanical transport are generally prohibited on all federal lands designated as wilderness.	NSU	No buffer
Special Designations-Wilderness Areas.		Muddy Mountain Wilderness Area	There shall be no commercial enterprise and no permanent road within any wilderness area designated. There shall be no temporary road. No use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area. Motorized equipment and equipment used for mechanical transport are generally prohibited on all federal lands designated as wilderness.	NSU	No buffer

Table C.3-32 Las Vegas Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Special Designations-ACEC		Mormon Mesa ACEC	Critical tortoise habitat ACEC. ROW avoidance area except within designated corridor; NSO for leasing; "Limited to designated roads and trails" for all motorized and mechanized vehicles. Limit utility corridors to 3,000 feet or less in width. On a case-by-case basis, support fencing of highways and moderately-to-heavily traveled dirt roads with tortoise-proof fencing and installation of culverts to allow tortoises to cross under the highway and roads. Require reclamation of disturbed lands resulting from activities that result in loss or degradation of tortoise habitat with habitat be reclaimed so that pre-disturbance condition can be reached within a reasonable time frame. Reclamation may include salvage and transplant of cactus and yucca, recontouring of the area, scarification of compacted soil, soil amendments, seeding, and transplant of seedling shrubs. Subsequent seeding or transplanting efforts may be required if monitoring indicates that the original effort was not successful. Require reclamation of temporary roads. Authorize new roads in response to specific proposed actions where no feasible alternative exists. Ensure access to private property. In general, proposed ACECs are Rights-of-Way avoidance areas (subject to designated corridors). New rights-of-way will be granted in these areas only when feasible alternative routes or designated corridors are not available.	CSU	No buffer
Special Designations-ACEC		Arrow Canyon ACEC	Designate as ROW avoidance area except within corridors. Close to mineral material ROWs. NSO. Requires reclamation of temporary roads. Authorize new roads in response to specific authorized actions only, ensure access to private property. R&I: Paleontological (Miocene bird tracks); Geological (candidate for the midcarboniferous Boundary stratotype section); cultural (prehistoric rock art).	CSU	No buffer
Special Designations-ACEC		Coyote Springs Desert Tortoise ACEC	Designated ACEC for Desert Tortoise. ROW avoidance area except within corridors. Closed to mineral material ROWs. NSO to fluid leasing. Require reclamation of temporary roads. Authorize new roads in response to specific authorized actions only, ensure access to private property.	CSU	No buffer
Special Designations-ACEC		Rainbow Garden ACEC	Critical tortoise habitat ACEC. ROW avoidance area except within designated corridor; NSO for leasing; Limited to designated roads and trails" for all motorized and mechanized vehicles. Limit utility corridors to 3,000 feet or less in width. On a case-by-case basis, support fencing of highways and moderately-to-heavily traveled dirt roads with tortoise-proof fencing and installation of culverts to allow tortoises to cross under the highway and roads. Require reclamation of disturbed lands resulting from activities that result in loss or degradation of tortoise habitat with habitat be reclaimed so that pre-disturbance condition can be reached within a reasonable time frame. Reclamation may include salvage and transplant of cactus and yucca, recontouring of the area, scarification of compacted soil, soil amendments, seeding, and transplant of seedling shrubs. Subsequent seeding or transplanting efforts may be required if monitoring indicates that the original effort was not successful. Require reclamation of temporary roads. Authorize new roads in response to specific proposed actions where no feasible alternative exists. Ensure access to private property.	CSU	No buffer
Special Designations-ACEC		River Mountains ACEC	Designated ACEC for geological, scientific, scenic, cultural, plants. ROW avoidance area except within corridors. Closed to mineral material ROWs. NSO to fluid leasing. Require reclamation of temporary roads. Authorize new roads in response to specific authorized actions only, ensure access to private property.		No buffer
Geology (Karst)		Caves	All lands within 0.25 mile of significant caves, exclusive of any designated corridors, are designated as right-of-way avoidance areas.	CSU	0.25 mile

Table C.3-32 Las Vegas Field Office No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Water Resources		All artificial and natural waters	Protect artificial and natural waters that provide benefit to wildlife by providing a minimum buffer of 0.25 mile for permitted activities (such as for off-road vehicle events).	CSU	0.25 mile
Special Designations-NCA		Sloan Canyon NCA	Outside the Wilderness, applications for new linear or site-type ROWs, or any amendments to existing ROWs, will be considered on a case-by-case basis within the NCA if the action furthers the purpose of the NCA in Section 602 of the Sloan Canyon NCA Act (Figure 2.11). Evaluation criteria will include, in part— Direct benefit to the NCA, such as utilities to serve NCA facilities; Maintaining or decreasing visual contrast; • Reduction of disturbed areas; Improvement in road/ROW alignments to minimize resource impacts. Designation and construction of trails, facilities, and ROWs will be limited within known lambing areas of bighorn sheep. Trail construction will be avoided in areas of known bighorn sheep movement between the North and South McCullough Mountains. In areas identified as having a medium to high potential for cultural resource sites (Duke et al. 2004), a Class III cultural resources inventory (100 percent) is required prior to any land disturbing undertaking. For areas with a low potential density for cultural resource sites, a reconnaissance-level inventory is required prior to land disturbing activities. Areas with a low potential will be considered for elimination of inventory requirements when sufficient information is available. All physical contact with petroglyphs, such as touching, chalking, and making impressions through rubbings or casting is prohibited except for traditional cultural purposes with a special use permit. Air quality dust control permits would be obtained from the Clark County Department of Air Quality and Environmental Management prior to the approval of any activity within the NCA .Special Status Species habitat will be maintained and protected to ensure suitable habitat conditions and viable populations. Disturbance or development will be avoided in areas of Special Status Species potential habitat. Disturbance or development will be mitigated in areas of Special Status Species habitat discovered during pre-activity site-specific surveys. Within Zone 2 (Semi–Primitive, Non-Motorized MEA)—Conduct restoration if the surface disturbing activity may have a short-term impact on natural vegetation community processes or if it reduces the viability of local species populations. The NCA is VRM II—Retain the existing character of the landscape. The level of change to the characteristic landscape should be low and may not attract the attention of casual viewers.	CSU	No buffer

Table C.3-33 Las Vegas Field Office Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Big Game	Big horn sheep	Sloan Canyon NCA	Surface disturbing activities will be limited within known lambing areas from January through May.	TL	1/1 to 5/1	No buffer
Wildlife-Raptors	All unspecified	Nests within Sloan Canyon NCA	Construction of trails, facilities, or ROWs will be seasonally restricted within an appropriate distance of occupied raptor nesting sites.	TL	No dates given	None specified

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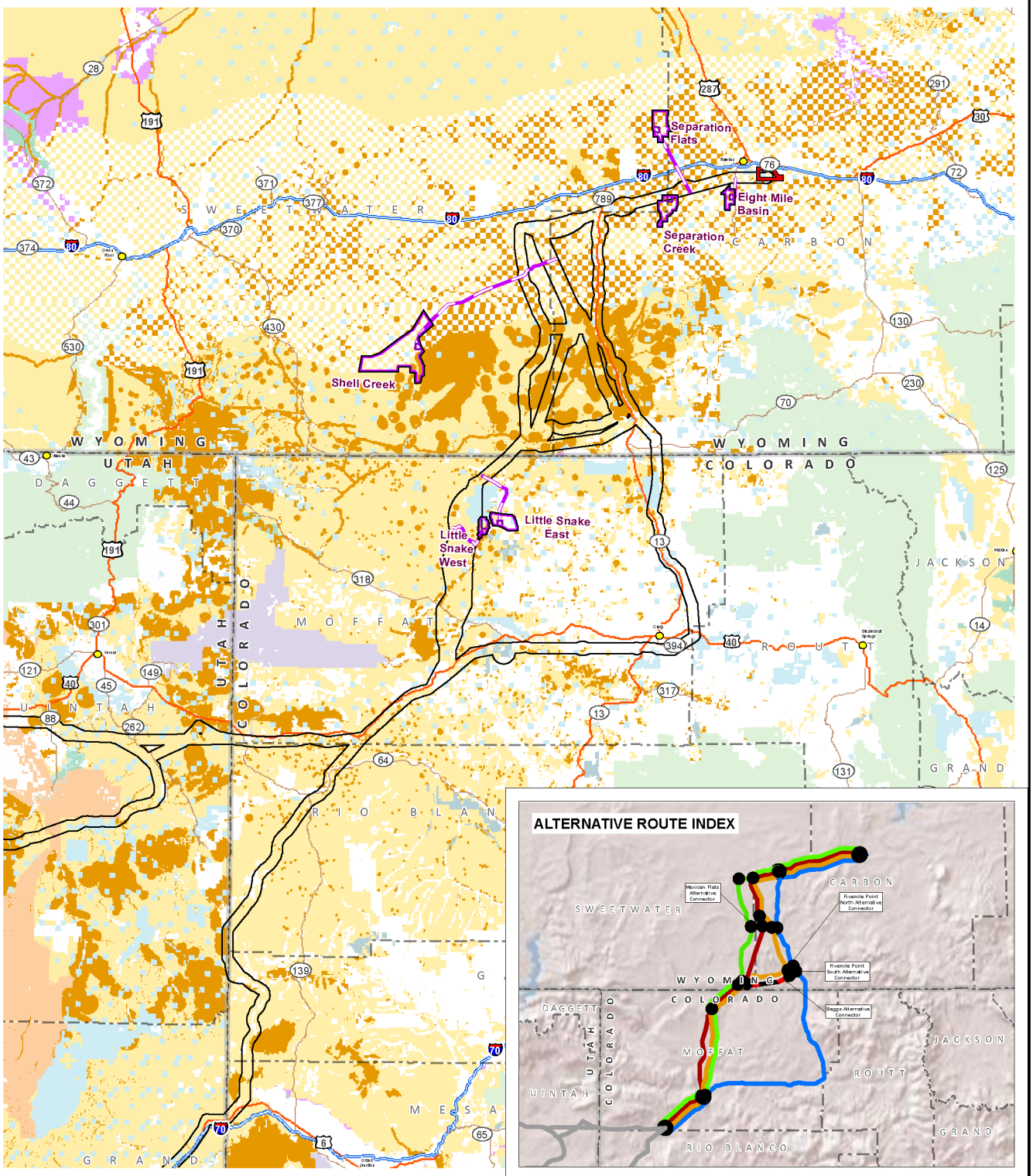

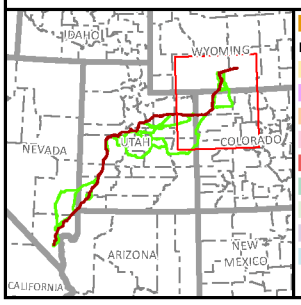

Land Jurisdiction

- NSU Restriction
- Bureau of Land Management
- Bureau of Reclamation
- Tribal/BIA
- DOD/USACE
- Department of Energy
- US Fish & Wildlife
- US Forest Service
- National Park Service
- State Land
- Private

- Project Corridor
- Terminal Siting Area
- Potential Ground Electrode Siting Area
- Potential Ground Electrode Site
- Potential Ground Electrode Overhead Electrical Line

DEIS Alternative Routes

- Applicant Proposed I-A
- Alternative I-B
- Alternative I-C
- Agency Preferred I-D
- Alternative Variation or Connector
- Segment not in this Region

TRANSWEST EXPRESS TRANSMISSION PROJECT

Figure C-1
Region I
No Surface Use

0 5 10 20 Miles
0 5 10 20 km
1:1,750,000

N

Western AREA POWER ADMINISTRATION

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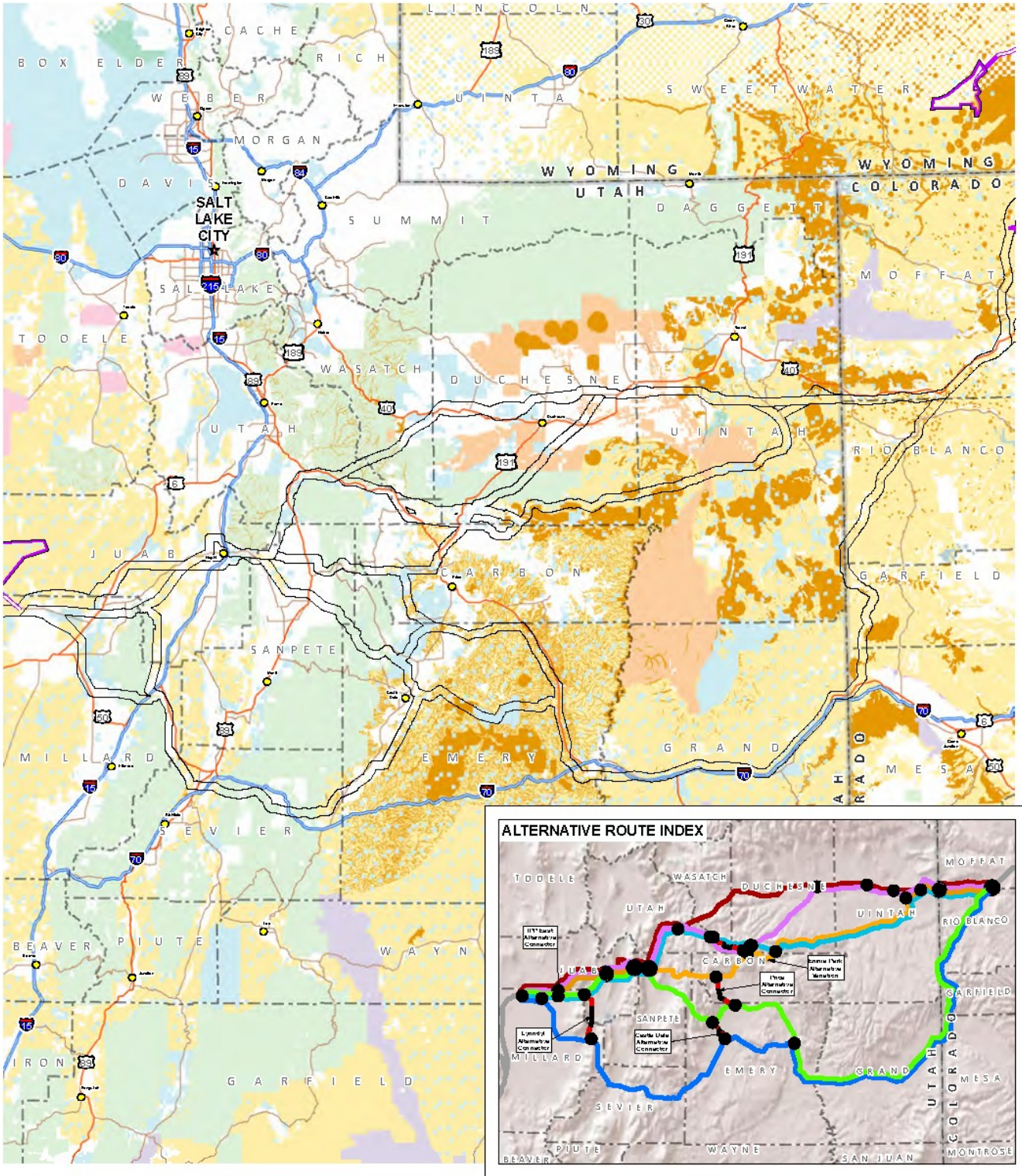

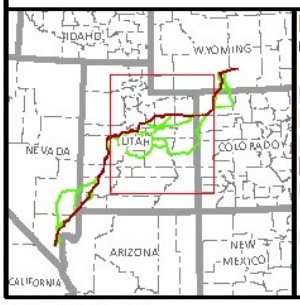

NSU Restriction

Land Jurisdiction

- Bureau of Land Management
- Bureau of Reclamation
- Tribal/BIA
- DOD/USACE
- Department of Energy
- US Fish & Wildlife
- US Forest Service
- National Park Service
- State Land
- Private

- Project Corridor
- Potential Ground Electrode Siting Area
- Potential Ground Electrode Site
- Potential Ground Electrode Overhead Electrical Line

DEIS Alternative Routes

- Applicant Proposed II-A
- Alternative II-B
- Alternative II-C
- Alternative II-D
- Alternative II-E
- Agency Preferred II-F
- Alternative Variation or Connector
- Segment not in this Region

TRANSWEST EXPRESS TRANSMISSION PROJECT

Figure C-2
Region II
No Surface Use

0 10 20 40 Miles
0 10 20 40 km
1:2,250,000
N

Western AREA POWER ADMINISTRATION

Exported On: 3/14/2013

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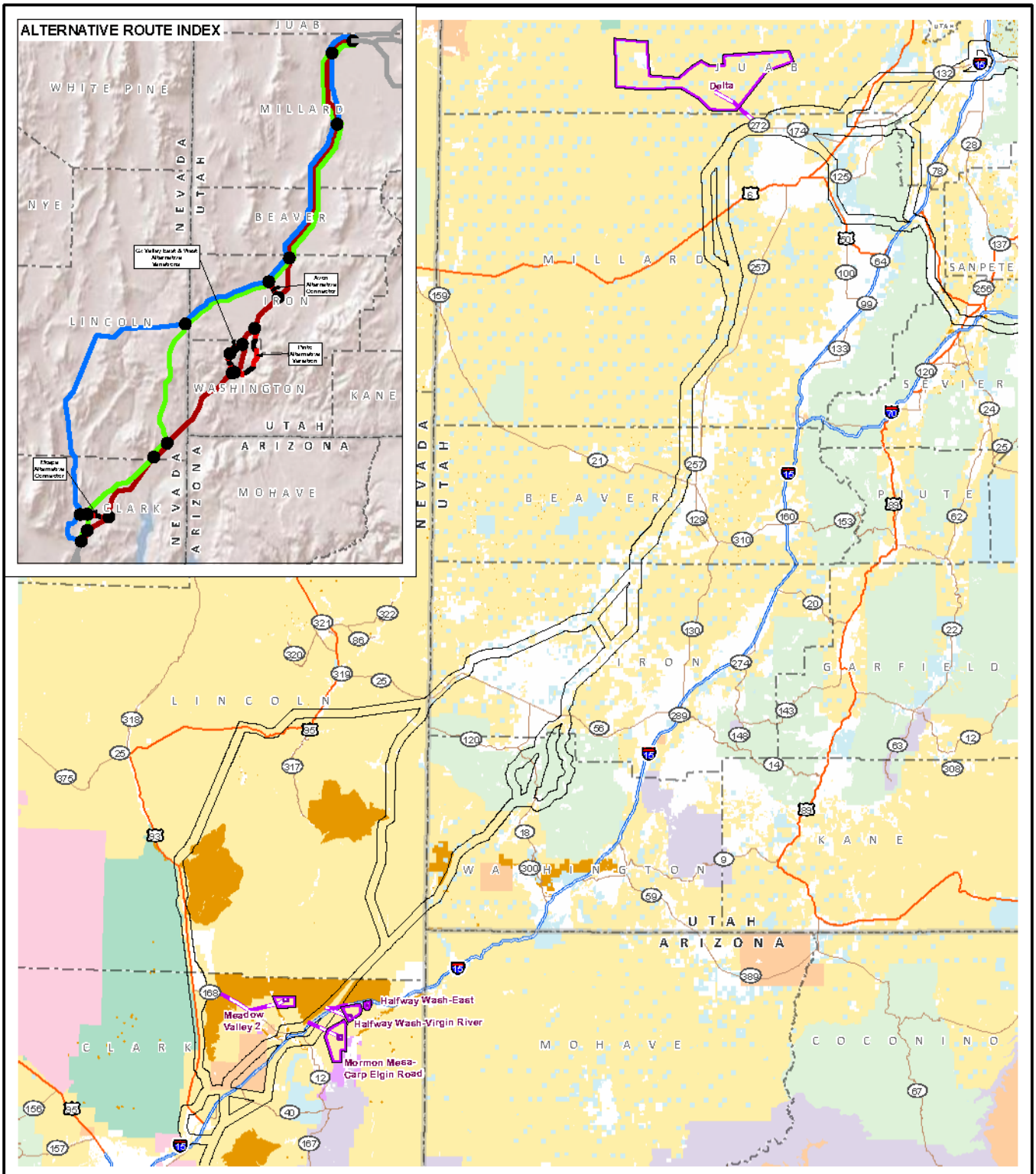

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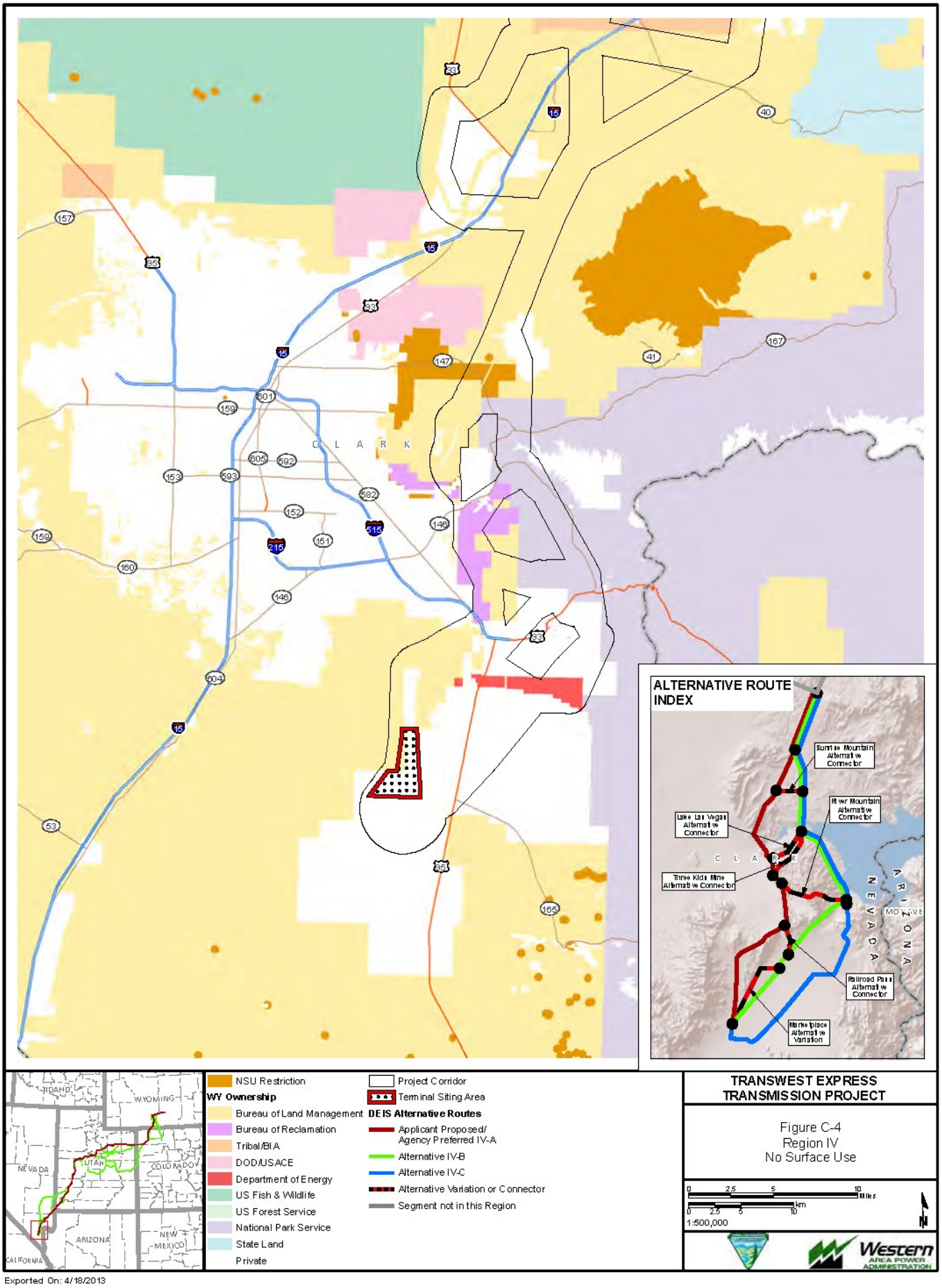

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C.4 Applicable USFS Standards and Guidelines

C.4.1 National Forest System Stipulation References

The following section details the Standards and Guidelines and references to the National Forest System NSU, CSU, and TL stipulations applicable to the proposed transmission line corridor.

C.4.1.1 Ashley National Forest, Utah

References: IRA map; Land and Resource Management Plan for the Ashley National Forest, 1986 (Appendix G—References, page 4; Appendix H—Exhibit No. 2 - Mitigation Measures Required of Applicants by Federal Agencies for High Voltage/Extra High Voltage Electrical Transmission Lines); RMP, Management Area Stipulations; Ashley Forest Plan Amendment CC-1, Guideline A; Ashley Plan Amendment CC-1, Guideline S.

The following four management areas are within the Project area.

- **Management Area D (Livestock Grazing)**: Managed for livestock grazing. Open to all recreation uses and generally all travel. Other construction is permitted if conflicts with livestock grazing are mitigated. Riparian areas maintained to protect streambank stability.
- **Management Area E (Wildlife Habitat Emphasis)**: Includes portions of summer and winter ranges, T&E habitat, strutting areas, calving and fawning areas and spawning areas. Recreation may be closed or restricted during key use periods. Road closures are common to in stress seasons for featured species. Livestock grazing may be limited or excluded and mineral development may have seasonal or NSO restrictions. New construction would be mitigated for wildlife needs. Riparian areas are protected.
- **Management Area F (Dispersed Recreation Roaded**): Area receiving a variety of uses in a variety of landforms and vegetation types in a roaded environment. Dispersed recreation is favored over other resources. Improvements designed to enhance recreation opportunities and optimize species diversity. Construction allowed as needed. Maintenance at high levels on main roads. May have road closures to protect resources.
- **Management Area N (Existing Low Management Emphasis)**: Resource protection as needed. Access may be controlled to enhance wildlife habitat. Improvements allowed on low investment basis. Habitat diversity. No restrictions to mineral development other than standard s and guidelines.

Within the Ashley National Forest, the Standards and Guidelines that are applicable to the TWE Project are applicable to all four Management Areas and are included in **Table C.4-1**.

Table C.4-1 Ashley National Forest Standard and Guidelines by Resource

MA	Resource	Description
General Management (all MAs)	Soils	IV-34.1. Use logging systems and techniques capable of minimizing soil loss, compaction, and other resource impacts. IV-37.2. Stabilize road corridors and control road use to reduce soil erosion. IV-37.2. Stabilize areas damaged by fire, mining, or other events.
General Management (all MAs)	Water	Water (General) (IV-37) Water Objective 1: Maintain or improve soil stability, site productivity and repair or stabilize damaged watersheds. Standards and Guidelines to meet Objective Obtain at least 80% of original ground cover within 5 years after project completion. Design activities to minimize project-caused sediment rates, not to exceed a 125% increase of the pre-project rates the first year and a 105% increase at the end of five years. Allow no activity that will lower water levels of natural water storage areas (lakes, ponds, etc.) that are currently undeveloped. Evaluate flood hazard and resource values for construction or reconstruction projects within the 100-year floodplain or riparian zone where facilities will not be allowed unless other alternatives have been reviewed and rejected as being more environmentally damaging. Avoid channelization of natural streams. Where necessary for flood control or fisheries enhancement, use stream geometry relationships to reestablish meanders, width/depth ratios, etc. All dredged material shall be removed above the high-water line or stabilized with armor such as riprap. Rehabilitate disturbed areas based on these priority considerations: Aquatic ecosystems; Riparian ecosystems; Riparian areas outside of aquatic and riparian ecosystems.
General Management (all MAs)	Riparian	Riparian (IV-45) Riparian Objective 1: Maintain or improve riparian areas and riparian dependent resource values including wildlife, fish, vegetation, watershed, and recreation in a stable or upward trend. Manage for species diversity. Standards and Guidelines to meet Objective Complete a riparian inventory and implement riparian management. Maintain the hiding and thermal cover qualities of forested riparian areas giving priority to the preservation of old growth for cavity dependent species, the preservation of hiding cover adjacent to mineral licks, wallows, and calving or fawning areas, and the preservation of hiding and thermal cover along waterways. Maintain natural complexity and high relative productivity of riparian areas. Maintain capability of riparian areas to act as an effective sediment buffering zone in relation to upslope activities. Riparian area dependent resources will be given preferential consideration in cases of unresolvable conflicts. Restrict facilities and ground disturbing activities to areas outside riparian areas unless alternative routes have been reviewed and rejected as being more environmentally damaging. Only land application of approved herbicides to control noxious weeds will be allowed provided that herbicides are not allowed to contaminate surface water. Riparian Objective 2: Manage vegetation to enhance the riparian ecosystem. Standards and Guidelines to meet Objective Manage vegetation in riparian areas to be in good or excellent ecological condition, with a stable or upward trend. Special harvesting techniques to protect riparian zones, such as directional felling and cable yarding, will be applied when needed to protect the riparian ecosystem. Prohibit landings and decking areas and limit temporary roads within riparian areas.

Table C.4-1 Ashley National Forest Standard and Guidelines by Resource

MA	Resource	Description
General Management (all MAs)	Wildlife-Big Game	Provide habitat capable of supporting a minimum of 5,600 elk and 43,700 deer. Maintain adequate wildlife cover within 100 feet of an opening of 10 acres or more. Maintain adequate downed material and standing snags for wildlife habitat as identified below: Aspen: 70% of maximum population potential or 1.3 snags/acre Douglas fir: 50% of maximum population potential or 1 snag/acre Lodgepole pine: 40% or maximum population potential or 0.7 snag/acre (Spruce-Alpine fir) Ponderosa Pine: 80% of maximum population potential or 2.7 snag/acre Riparian: any species, 70% of maximum population potential or 1.3 snag/acre Identify and map elk calving areas, deer and antelope fawning areas, and sage grouse strutting and nesting areas for assessing cumulative impacts. Establish and maintain thermal and security cover needs to meet the Forest's big game habitat objectives. Resource management activities will be allowed if they will not adversely affect any T&E or sensitive species. Consult with the U.S. Fish and Wildlife Service when actions have the potential to affect any threatened or endangered species. Maintain the hiding and thermal cover qualities of forested riparian areas giving priority to the preservation of old growth for cavity dependent species, the preservation of hiding cover adjacent to mineral licks, wallows, and calving or fawning areas, and the preservation of hiding and thermal cover along waterways. Eliminate special uses that conflict with wildlife in identified wintering areas. Design and construct roads to avoid adversely affecting critical wildlife areas.
General Management (all MAs)	Wildlife-Goshawk	(Standard) When non-vegetative management activities (for example, land exchanges, recreation facility development, ski resort construction, utility corridors, etc.) are proposed that would result in a loss of suitable goshawk habitat, sufficient mitigation measures will be employed to ensure an offset of the loss. The biological evaluation (BE) process will be used to document findings, recommend mitigation measures, and evaluate consistency with the intent of the Conservation Strategy and Agreement for Management of the Northern Goshawk in Utah. (Guideline) Utilize native plant species from locally adapted seed sources in management activities when and where practical. Non-native plant species have the potential to cause systems to move outside of HRV; therefore, the use of non-native species should be justified to indicate how their use is important to maintain or restore a cover type to functioning conditions. (Standard) Use the latest Regionally accepted Biological Prefield Research form (USFS Region 4) to determine the level of goshawk field survey(s) needed to complete the BE. Completion of this form is required to document where surveys are not required. (Standard) Where goshawk field surveys are required, complete surveys for territory occupancy within suitable habitat. Surveys will be completed during the nesting and/or post-fledgling period, and must be conducted at least one year prior to implementation of management actions. (Guideline) Where goshawk field surveys are required and when project planning permits, two consecutive years of surveys for territory occupancy prior to implementation of management actions is preferred. (Guideline) If a historic nest is not associated with an active nest area, management direction for home range habitat should be applied. (Standard) When an active nest area has been identified, identify 2 alternate nest areas and 3 replacement nest areas. The next two guidelines provide recommended direction for implementation of this standard. (Guideline) Each nest area (active, alternate, and replacement) should be approximately 30 acres (total of approximately 180 acres) in size when sufficient suitable habitat exists. If sufficient amounts of suitable habitat are not present, use existing suitable habitat that is available. (Guideline) Alternate nest areas should be identified in suitable habitat with similar vegetative structures as the active nest areas. Replacement nest areas should be identified in habitat which will develop similar vegetative structures as the active nest area at the time the nest was active and alternate nest areas are projected to no longer provide adequate nesting habitat.

Table C.4-1 Ashley National Forest Standard and Guidelines by Resource

<table>
<tr><th>MA</th><th>Resource</th><th>Description</th></tr>
<tr><td></td><td></td><td>(Standard) Prohibit forest vegetative manipulation (timber harvest, prescribed burning, fuelwood, thinnings, weedings, etc.) within active nest areas (approximately 30 acres; i.e., Guideline p.) during the active nesting period. The active nesting period will normally occur between March 1 and September 30. For non-vegetative activities (such as road maintenance, oil and gas exploration, recreation sites, etc.), adjacent to a new nest site, or a new activity adjacent to an established nest, the following Guideline applies.
(Guideline) In active nest areas (approximately 30 acres; i.e., Guideline p.), restrict Forest Service management activities and human uses for which Forests issue permits during the active nesting period (does not include livestock permits) unless it is determined that the disturbance is not likely to result in nest abandonment. If the disturbance is likely to result in abandonment, a BE must be completed. To implement the action, the BE must conclude that the action is consistent with the intent of the Conservation Strategy and Agreement for Management of the Northern Goshawk in Utah.
(Guideline) Forest vegetative manipulation within active, alternate, and replacement nest areas should be designed to maintain or improve desired nest area habitat. Use the active nest area habitat characteristics as an indicator of the desired nest area habitat, and as the best available information for nest area habitat for that cover type.
(Guideline) Identify a Post-Fledgling Area (PFA) which encompasses the active, alternate, and replacement nest areas and additional habitat needed to raise fledglings. A PFA should be approximately 420 acres in size (exclusive of nest area acres) when sufficient suitable habitat exists. If sufficient amounts of suitable habitat are not present, use existing suitable habitat that is available.
(Guideline) Forest vegetative manipulation within the PFA should be designed to maintain or improve the same habitat features as discussed for the goshawk home range (i.e., stand structure, snags, downed logs, nest trees important in the life histories of the goshawk and its prey species common to the geographic location), except:
i) Openings, as defined in glossary and Reynolds et al., created as a result of mechanical vegetative treatments (does not include wildland fire) should not exceed the following by cover type:
<table>
<tr><th>Cover Type</th><th>Maximum Created Opening Size</th></tr>
<tr><td>Ponderosa Pine and Mixed Conifer</td><td>2 acres</td></tr>
<tr><td>Spruce/Fir</td><td>1 acre</td></tr>
<tr><td>Aspen and Lodgepole Pine</td><td>Follow current management direction</td></tr>
</table>
ii) Management activities should be restricted during the active nesting period. The active nesting period will normally occur between March 1 and September 30.
iii) Where timber harvest is prescribed to achieve desired forest conditions, plan the transportation system to minimize disturbance to the PFAs. For example, small permanent skid trails should be used in lieu of roads to minimize disturbance in goshawk PFAs. Variance may occur if it is determines that a combination of new permanent or temporary roads and permanent skid trails would result in less overall disturbance to PFA habitat.</td></tr>
</table>

Table C.4-1 Ashley National Forest Standard and Guidelines by Resource

MA	Resource	Description
General Management (all MAs)	Recreation	Implement the Forest District Travel Plans. Review annually and revise if necessary using the following guidelines: 1. Retain travel route and include it on the Forest's transportation system if: a) Road or trail is required for Forest Service management and public access. Road or trail may be restricted: 1) Seasonally - to protect road bed or reduce maintenance expenditures; to protect wildlife species and habitat. 2) Temporarily - to provide for public safety. b) Road or trail is required for access to private or State land, mining claims, and special use permits. Road or trail use may be restricted : 1) Seasonally - to protect road bed; to protect wildlife species and habitat. 2) Permanently - use would be authorized by a special use permit. c) Resource planning shows a future anticipated need. Road or trail use may be restricted: 1) Seasonally - to protect road bed; to protect wildlife species and habitat. 2) Permanently - to protect wildlife habitat (administrative or authorized use could be permitted) - to protect the investment. i) Road or trail shows trend leading to vegetative damage or soil displacement. ii) Road or trail is located in such a way that siltation caused from use reaches live streams. iii) Road or trail is interrupting or degrading the natural value or functions of unique ecosystems (i.e., riparian, alpine). 2. Obliterate road or trail and exclude it from the Forest's transportation system if: a) The road or trail is not necessary to meet Forest Service management objectives. b) The road or trail and its associated use is causing resources damage by: 1) Displacing soil and/or degrading water quality. 2) Degrading VQOs. 3) Displacing wildlife. 4) Subjecting Forest users to excessive noise or dust pollution. 5) Allowing access to sensitive sites leading to: i) Vegetative damage through trampling or compaction. ii) Degradation of water quality through poor sanitation. 6) Interrupting or degrading natural values or functions of unique, limited ecosystems. 3. Areas may be closed or restricted: a) To protect the public in concentrated use areas. b) To protect unique resources (i.e., cultural, geologic). c) To protect natural resources and prevent damage to the natural values or functions of the ecosystems. d) To achieve a variety of recreational opportunities. 4. Construct and maintain structures to protect financial investment, provide for public safety, and protect other resources. Provide and ensure compliance with specifications for the construction, maintenance, and operation of utilities, including powerlines, pipelines, and radio/TV microwave sites, compatible with adjacent land uses, as prescribed in the Corridor Plan and by operating licenses/permits.

Table C.4-1 Ashley National Forest Standard and Guidelines by Resource

MA	Resource	Description
General Management (all MAs)	Aquatic Resources	Identify and manage habitats capable of supporting self-sustaining trout populations. (Ashley National Forest) Provide appropriate aquatic and terrestrial habitat analysis input to all resource management activities. (Ashley National Forest) Maintain all streams for a biotic condition index (BCI) or 75 or above and a habitat condition index (HCI) or 42 or above. (Ashley National Forest) Resource management activities will be allowed if they will not adversely affect any T&E or sensitive species .(Ashley National Forest) Give priority to structural habitat improvement work in streams containing Colorado River cutthroat trout strains. (Ashley National Forest) Consult with the U.S. Fish and Wildlife Service when actions have the potential to affect any threatened or endangered species. (Ashley National Forest) See additional for “Soils, Water, and Air” related to riparian and aquatic habitat. (Ashley National Forest)

C.4.1.2 Manti-LaSal National Forest

References: IRA map; Land and Resource Management Plans for the Manti-La Sal National Forest, 1986.

The following seven management areas are within the Project area.

- **General Big-Game Winter Range (GWR)**: Management emphasis is on providing general big-game winter range. These are areas wildlife traditionally use. Treatments of various types are applied to increase forage production and plant species composition. Investments in compatible resource activities may occur. Permanent roads and special uses may be permitted. Short-term or temporary roads are obliterated and rehabilitated within one year after intended use. Motorized use is managed as appropriate to prevent unacceptable stress on big-game animals during the primary use season. Specific cover opening ratios, opening width, and stand design are maintained in pinyon-juniper chaining areas.
- **Key Big-Game Winter Range (KWR)**: Management emphasis is on providing winter forage and cover for big-game species in areas that must be available and unencumbered for wildlife use each year during the critical winter period. Vegetative treatments are applied to increase forage production of grass, forb, and especially browse species and/or to create and maintain thermal and hiding cover. Conflicting uses are not permitted on a continuing basis, but may be permitted outside the critical season if there is no long-term degradation. New roads other than short-term (temporary) roads are located outside of the management unit. Short-term roads will be rehabilitated to provide for wildlife use within one season after completed use. Prohibit motorized use to prevent unacceptable stress on big game during critical use periods.
- **Developed Recreation Sites (DRS)**: Management emphasis is for developed recreation facilities such as campgrounds, picnic grounds, trailheads, visitor information facilities, summer homes areas, ski areas, and water-related support facilities. Proposed sites) are managed to maintain the site attractiveness until developed. Facilities such as roads, trails, signs, etc., may dominate or subordinate, but should harmonize and blend with the characteristic landscape. As appropriate, existing developed sites should be withdrawn from locatable mineral entry, and closed to surface occupancy for leasable and saleable minerals. The prescription can be considered for application to all existing developed recreation sites and proposed sites identified for development.
- **Minerals Management Area (MMA)**: Management emphasis is on making land surface available for existing and potential major mineral developments. This prescription is applies where the lands surface is or will be used for facilities needed for the extraction of leasable minerals over an extended period. The areas associated with known, potential, development sites are included in this unit. Additional areas may be added to this unit as mines or fields are located and developed. As the developments are removed and restoration is completed, these areas may be changed to other appropriate management units. In units where mineral development is pending, renewable resource activities strive to be compatible with the management goals of adjacent management units. Long-term investments, such as timber planting, generally are not made. However, short-term investments, such as range and wildlife revegetation projects, may be made on these units.
- **Range Forage Production (RNG)**: Emphasis is on production of forage and cover for domestic livestock and wildlife. Intensive grazing management systems are generally favored. Some periodic heavy forage utilization may occur. Opportunities for investments in structural and non-structural improvements to increase forage production is moderate to high. Investments are made in compatible resource activities. Dispersed recreation opportunities vary between semi-primitive non-motorized and roaded natural appearing. Management activities are evident, but harmonize with the natural setting

- **Utility Corridor (UC)**: Emphasis is on providing transportation corridors for major cross-country pipelines, electrical transmission lines, and telephone lines. Management activities within these linear corridors strive to be compatible with the management goals of the adjacent management units.
- **Wood Fiber Production and Utilization (TBR)**: Emphasis is on management for the production and use of wood-fiber for a variety of wood products. The harvest methods by Forest cover type are single tree and group selection and shelterwood in Englemann spruce-subalpine fire, Douglas-fire, ponderosa pine, mixed conifers, and clear cutting in aspen. Harvesting will be accomplished with methods including cable, conventional crawler tractor, or rubber-tired skidders. Pre-commercial thinning and intermediate harvest will be used to increase or maintain fiber production. Dispersed recreation opportunities vary between semi-primitive non-motorized and roaded natural appearing. Wildlife habitat diversity may be enhanced by vegetative manipulation. Livestock grazing may be permitted. This prescription could alter water yield through vegetation management, as well as decreased evapotranspiration and maximize snow retention in small openings on low energy slopes.
- **Research, Protection, and Interpretation of Lands and Resource (RPI)**: Management emphasis for these units is to manage unique ecological, geological, paleontological, archeological, or historical sites or features of the Forest for research, protection, and/or interpretation of land and resources condition while making them available for study and viewing. Other resource use may be made of these units as long as they do not conflict with the purpose for which they exist. Activities that might cause impairment or occupancy of the unit for any reason other than interpretive are usually prohibited.
- **Special Land Designation (SLD)**: Management emphasis is on making lands available for existing and potential specialized uses. Sites that may be considered for application of this prescription include Ranger or Guard Stations and other administrative sites, electronic sites, and similar special land uses. Generally, other resource development and use activities within these units strive to be compatible with the management goals of the adjacent management units. However, this is often limited by the special activity or use authorized on the unit.
- **Undeveloped Motorized Recreation Sites (UDM)**: Management emphasis is on providing high quality dispersed recreation opportunities in areas characteristically receiving moderate to heavy levels of use. Visual resources are managed so that activities of man remain visually subordinate or are not evident. Range, timber, wildlife, and mineral resource activities and use may occur subject to maintaining appropriate ROS user experience or setting characteristics visual quality objectives, not permanently exceeding threshold levels for noise and air quality, or seriously impairing recreation use. These units generally occur along arterial and collector roads, although they may occur along local roads or trails and generally near water bodies.

Within the Manti-LaSal National Forest, the Standards and Guidelines that are applicable to the TWE Project are applicable to all four Management Areas and are included in **Table C.4-2**.

Table C.4-2 Manti-La Sal National Forest Standard and Guidelines by Resource

MA	Resource	Description
General Management (all MAs)	Water	Water Quality Management (General) (F00) (III-30) Water Objective 1: Maintain or improve water quality. Standard 1: Meet Utah and Colorado State Water Quality Standards (FSM 2532). Water Quality Management Objective 2: Implement best management practices relative to water quality in all resource activities. Standard 1: Follow Nonpoint Source Water Quality Management Plan for Utah and Colorado.

Table C.4-2 Manti-La Sal National Forest Standard and Guidelines by Resource

<table>
<tr><th>MA</th><th>Resource</th><th>Description</th></tr>
<tr><td rowspan="3">General Management (all MAs)</td><td rowspan="3">Wildlife</td><td>Provide habitat needs, as appropriate, for Management Indicator Species.
A. Deer and Elk
(1) Maintain adequate hiding cover around calving areas.
(2) Optimum habitat mix for the daily normal range is 25 percent hiding cover, 15 percent thermal cover, 10 percent hiding or thermal cover and 50 percent foraging area.
(4) Manage key deer and elk habitat so as to minimize disturbance during the period of use.
B. Golden Eagle
(1) Avoid activities that could cause abandonment of actives nests.</td></tr>
<tr><td>6) Provide for habitat needs of cavity nesting birds, raptors, and small animals by:
A. Through coordination with project work or resource uses, insure the appropriate density of snags are available and protected in vegetative types.
B. Selecting and utilizing live trees to create snags.
a. A snag is defined as a completely or partially dead standing tree at least 4 inches DBH and at least 6 feet in height.
b. Maintain various size classes of standing snags with the approximate density per 100 acres based on broad vegetative types.
<table>
<tr><td></td><td>No./100 Acres</td></tr>
<tr><td>(1) Ponderosa pine</td><td>110</td></tr>
<tr><td>(2) Mixed Conifer (Spruce/Fir/Douglas</td><td>90</td></tr>
<tr><td>(3) Aspen</td><td>120</td></tr>
<tr><td>(4) Pinyon-Juniper</td><td>15</td></tr>
<tr><td>(5) Riparian</td><td>120</td></tr>
</table>
c. R-4 Supplement 26 to FSM 2631.</td></tr>
<tr><td>7) Manage down timber to provide habitat for wildlife.
b. Manage to provide at least two logs per acre in timber habitat types.</td></tr>
</table>

Table C.4-2 Manti-La Sal National Forest Standard and Guidelines by Resource

MA	Resource	Description
General Management (all MAs)	Wildlife-Goshawk	(Standard) When non-vegetative management activities (for example, land exchanges, recreation facility development, ski resort construction, utility corridors, etc.) are proposed that would result in a loss of suitable goshawk habitat, sufficient mitigation measures will be employed to ensure an offset of the loss. The biological evaluation (BE) process will be used to document findings, recommend mitigation measures, and evaluate consistency with the intent of the Conservation Strategy and Agreement for Management of the Northern Goshawk in Utah. (Guideline) Utilize native plant species from locally adapted seed sources in management activities when and where practical. Non-native plant species have the potential to cause systems to move outside of HRV; therefore, the use of non-native species should be justified to indicate how their use is important to maintain or restore a cover type to functioning conditions. (Standard) Use the latest Regionally accepted Biological Prefield Research form (USFS Region 4) to determine the level of goshawk field survey(s) needed to complete the BE. Completion of this form is required to document where surveys are not required. (Standard) Where goshawk field surveys are required, complete surveys for territory occupancy within suitable habitat. Surveys will be completed during the nesting and/or post-fledgling period, and must be conducted at least one year prior to implementation of management actions. (Guideline) Where goshawk field surveys are required and when project planning permits, two consecutive years of surveys for territory occupancy prior to implementation of management actions is preferred. (Guideline) If a historic nest is not associated with an active nest area, management direction for home range habitat should be applied. (Standard) When an active nest area has been identified, identify 2 alternate nest areas and 3 replacement nest areas. The next two guidelines provide recommended direction for implementation of this standard. (Guideline) Each nest area (active, alternate, and replacement) should be approximately 30 acres (total of approximately 180 acres) in size when sufficient suitable habitat exists. If sufficient amounts of suitable habitat are not present, use existing suitable habitat that is available. (Guideline) Alternate nest areas should be identified in suitable habitat with similar vegetative structures as the active nest areas. Replacement nest areas should be identified in habitat which will develop similar vegetative structures as the active nest area at the time the nest was active and alternate nest areas are projected to no longer provide adequate nesting habitat. (Standard) Prohibit forest vegetative manipulation (timber harvest, prescribed burning, fuelwood, thinnings, weedings, etc.) within active nest areas (approximately 30 acres; i.e., Guideline p.) during the active nesting period. The active nesting period will normally occur between March 1 and September 30. For non-vegetative activities (such as road maintenance, oil and gas exploration, recreation sites, etc.), adjacent to a new nest site, or a new activity adjacent to an established nest, the following Guideline applies. (Guideline) In active nest areas (approximately 30 acres; i.e., Guideline p.), restrict Forest Service management activities and human uses for which Forests issue permits during the active nesting period (does not include livestock permits) unless it is determined that the disturbance is not likely to result in nest abandonment. If the disturbance is likely to result in abandonment, a BE must be completed. To implement the action, the BE must conclude that the action is consistent with the intent of the Conservation Strategy and Agreement for Management of the Northern Goshawk in Utah. (Guideline) Forest vegetative manipulation within active, alternate, and replacement nest areas should be designed to maintain or improve desired nest area habitat. Use the active nest area habitat characteristics as an indicator of the desired nest area habitat, and as the best available information for nest area habitat for that cover type. (Guideline) Identify a Post-Fledgling Area (PFA) which encompasses the active, alternate, and replacement nest areas and additional habitat needed to raise fledglings. A PFA should be approximately 420 acres in size (exclusive of nest area acres) when sufficient suitable habitat exists. If sufficient amounts of suitable habitat are not present, use existing suitable habitat that is available. (Guideline) Forest vegetative manipulation within the PFA should be designed to maintain or improve the same habitat features as discussed for the goshawk home range (i.e., stand structure, snags, downed logs, nest trees important in the life histories of the goshawk and its prey species common to the geographic location), except: i) Openings, as defined in glossary and Reynolds et al., created as a result of mechanical vegetative treatments (does not include wildland fire) should not exceed the following by cover type:

Table C.4-2 Manti-La Sal National Forest Standard and Guidelines by Resource

MA	Resource	Description
		<table><tr><th>Cover Type</th><th>Maximum Created Opening Size</th></tr><tr><td>Ponderosa Pine and Mixed Conifer</td><td>2 acres</td></tr><tr><td>Spruce/Fir</td><td>1 acre</td></tr><tr><td>Aspen and Lodgepole Pine</td><td>Follow current management direction</td></tr></table> ii) Management activities should be restricted during the active nesting period. The active nesting period will normally occur between March 1 and September 30. iii) Where timber harvest is prescribed to achieve desired forest conditions, plan the transportation system to minimize disturbance to the PFAs. For example, small permanent skid trails should be used in lieu of roads to minimize disturbance in goshawk PFAs. Variance may occur if it is determines that a combination of new permanent or temporary roads and permanent skid trails would result in less overall disturbance to PFA habitat.
General Direction	Dispersed Recreation Management (A14 and 15) (III-17)	3) Classify areas as to whether vehicular travel use is restricted.
General Direction	Special-Use Management (Non-Recreation) (J01) (III-37)	2) Encourage burying utility and lines, except when: A. Visual quality objectives of the area can be met using an overhead line. B. Burial is not feasible due to soil erosion or geologic hazard or unfavorable geologic conditions. C. Greater long-term site disturbance would result. D. It is not technically feasible, or economically reasonable.
		3) Approve special-use applications for areas adjacent to developed sites only when the proposed use is compatible with the purpose and use of the developed site.
KWR	Wildlife-Big Game	1) Provide big-game forage, cover, and habitat to help achieve the wildlife population objectives identified in interagency herd unit plans. a. Maintain at least 30% of shrub plants in mature age, and at least 10% in young age classes. b. Maintain at least two shrub species on shrub lands capable of growing two or more shrub species.
		1) Forest habitat types within this unit will be managed to provide big-game forage, thermal cover, and security in association with the other vegetative habitat types.
		1) Prohibit and/or eliminate special uses that conflict with wintering animals.
		2) Authorize only those uses that would enhance or improve winter range condition.
		Use road or area closures to maintain habitat effectiveness. a. Prohibit activities during critical periods of big-game use. b. Approved activities must be short-term and prompt reclamation must be assured.
		2) Prohibit new permanent roads in the unit.
		3) Allow short-term (temporary) roads where the use would not conflict with wintering big game.
		1) Manage recreational activities so they do not conflict with wildlife use of habitat. a. Close management units to vehicular travel and to snowmobile use during the critical use season.

Table C.4-2 Manti-La Sal National Forest Standard and Guidelines by Resource

MA	Resource	Description
GWR	Wildlife-Big Game	1) Provide big-game habitat needed to help achieve the big- game population objectives identified in interagency herd unit plans. a. Maintain at least 30% of shrub plants in mature age, and at least 10% in young age classes. b. Maintain at least two shrub species on sites capable of growing two or more shrub species. c. Maintain habitat capability at a level at least 50% of potential for big game. d. Activities or uses which induce human activity within the area may be modified, rescheduled, or denied if the combination of accumulated impacts on vegetation, behavior, and /or mitigation reduce effective habitat use below 80% of base year 1980 capacity of this unit.
		Allow new roads to meet management needs. Obliterate and rehabilitate temporary toads within one season after planned use ends. a. New roads may be constructed when; (1) There is no acceptable alternative to build the road outside the unit, and the road is essential to achieve priority goals and objectives of contiguous management units, or to provide access to land administered by other government agencies or to contiguous private land. (2) Winter road use will not significantly disturb wintering big-game animals. (3) Roads cross the winter range in the minimum distance feasible to facilitate the needed use.
		2) Close and/or restrict road use as appropriate to reduce stress on big-game animals.
	Dispersed Recreation Management (A14 and 15)	1) Manage recreational activities so they do not conflict with wildlife use of habitat. a. Restrict snowmobile use to designated routes if conflicts with wintering animals occur. b. Restrict vehicular travel on non-roaded areas if conflicts with habitat needs.
	Special Use Management (Non-recreation) (J01)	1) As appropriate, permit special uses if they do not conflict with big-game wintering.
	Special Use Management (Non-Recreation) (J01)	3) Discourage or prohibit any uses which contribute to impairment of the values for which the unit is established.
	Transportation System Management (L01 and 20)	1) Generally, transportation system facilities are permitted where the facility is compatible with the purpose for which the unit is established.
DRS (Developed Recreation Sites)	Management of Developed Recreation Sites (A08, 09, 11, and 13)	1) Construct, reconstruct, and maintain developed sites in accordance with the established Recreation Opportunity Spectrum (ROS) classification for the management unit.
	Transportation System Management (L01 to 20)	1) Design, construct, and maintain roads to assure they are compatible insofar as possible with developed recreation sites use unit objectives. a. FSM 2300.
	Air Resource Management (P16)	1) Manage facilities in and adjacent to recreation sites to maintain acceptable levels of air quality.
	Noise Abatement (P23)	1) Restrict uses that cause noise levels to that which should provide desirable recreation opportunities. a. Noise levels within these units will generally be restricted to 30 decibels or less except for noises generated by normal conservation and developed recreation activities.

Table C.4-2 Manti-La Sal National Forest Standard and Guidelines by Resource

MA	Resource	Description
TBR (Wood-fiber Production and Harvest) (III-67)	Dispersed Recreation Management (A14 and 15)	1) Semi-primitive non-motorized, semi-primitive motorized, roaded natural and rural recreation opportunities may be provided.
		2) Prohibit recreation use (including snowmobiles, vehicular travel, cross-crounty skiing etc.) where needed to protect forest plantations.
RNG	Dispersed Recreation Management (A14 and 15)	1) Semi-primitive non-motorized, semi-primitive motorized, roaded natural and rural recreation opportunities may be provided. a. Specific vehicular travel restrictions if any based on vehicular travel use management (FSM 2355).
RPI	Wildlife	1) Prohibit any direct wildlife habitat manipulation that will detract from those values for which the unit is established.
	Dispersed Recreation Management (A14 and 15)	1) Semi primitive non- motorized, semi-primitive motorized, roaded natural, and rural recreation opportunities may be provided. a. Prohibit or restrict motorized vehicle use as appropriate. b. Limit or restrict camping in existing or proposed units
	Aquatic	1) Manage soil and water resource activities to be compatible with the values of the unit. Provide habitat needs, as appropriate, for Management Indicator Species. Macroinvertebrate deleted through amendment – any other aquatic MIS? (Manti-La Sal National Forest) Manage habitat for recovery of endangered and threatened species. Where activities or uses may impact T&E species or their habitats, initiate consultation procedures. Include the results of consultation in determining the viability of the activity or use. (Manti-La Sal National Forest) Implement activities to meet the Forests' share of approved recovery plans. (Manti-La Sal) Manage habitat of sensitive species to keep them from becoming threatened or endangered. (Guideline) Management actions should be designed to encourage conditions that are within the historic range of variation (HRV) as defined by Regional or local properly functioning condition (PFC) assessments. PFC operates within the range of HRV where extreme events are not desired. Actions should remain within the variability of size, intensity, and frequency of native disturbance regimes characteristic of the subject landscape and ecological processes. See amendment 14 for additional standards and guidelines. (Manti-La Sal National Forest) Maintain and/or improve habitat and habitat diversity for minimum viable populations of existing vertebrate wildlife species. (Manti-La Sal) Manage waters capable of supporting self-sustaining fish populations to provide for those populations. Manage stream habitat to at least 50% of potential where existing self-sustaining fisheries occur. Proposed management activities which may cause unfavorable conditions in existing fisheries will include mitigation measures. (Manti-La Sal National Forest) Improve or maintain water quality. Meet Utah and Colorado State Water Quality Standards (FSM 2532). (Manti-La Sal National Forest) Implement best management practices relative to water quality in all resource activities. Nonpoint Source Water Quality Management Plan for Utah and Colorado. (Manti-La Sal National Forest) Prior to implementation of project activities, delineate and evaluate riparian areas and or wetlands that may be impacted. FSM 2542. (Manti-La Sal National Forest) Give preferential consideration to riparian area dependent resources in cases of unresolvable resource conflicts. FSM 2536. (Manti-La Sal National Forest) Flood plains should be identified and, as appropriate, a risk/hazard analysis performed for project sites where long-term occupancy is proposed. FSM 2527. (Manti-La Sal National Forest) Protect present and necessary future facilities that cannot be located out of the 100-year floodplain by structural mitigation (deflection structures, riprap, etc.). Implement mitigation measures when present or unavoidable future facilities are located in active floodplain to ensure that public and facility safety requirements, State water quality standards, sediment threshold limits, bank stability criteria, flood hazard reduction and instream flow standards are met during and immediately after construction. (Manti-La Sal National Forest) Secure favorable flows of water to: Ensure that stream flows maintain stable and efficient channels and to provide for administrative and protection use,

Table C.4-2 Manti-La Sal National Forest Standard and Guidelines by Resource

MA	Resource	Description
		pursuant to 1897 Organic Act. Provide for fish and wildlife habitat, recreation and livestock use pursuant to the Multiple Use and Sustained Yield Act of 1960.FSH 2509.17. (Manti-La Sal National Forest)
		Obtain through the State, where appropriate, water rights for consumptive uses and instream flows as needed for the purposes of National Forest management. FSM 2541. (Manti-La Sal National Forest).
		Maintain instream flows to protect Forest resources and uses. Special-use permits, easements, rights-of-way, and similar authorization for use of National Forest System lands shall contain stipulations to maintain bypass flows necessary to fulfill National Forest uses and purposes. FSM 2541.
		Prohibit new or expansion of existing spring or other water source development and related facilities when; A. Loss of water results in unacceptable impacts on riparian, vegetation, fisheries, or other Forest resources and uses. B. Development and/or facilities would result in unacceptable erosion, road damage, land instability, or disruption or damage of other facilities or resources. (Manti-La Sal National Forest)
		Provide habitat diversity through vegetation treatments, and/or structural developments in conjunction with other resource activities, designed to maintain or approve wildlife or fisheries habitat. (Manti-La Sal National Forest)
		Provide for instream flows to support a sustained-yield of natural fisheries resources. (Manti-La Sal National Forest)
		Maintain a current fish habitat inventory in cooperation with State wildlife agencies. (Manti-La Sal National Forest)
		Vegetate disturbed soils in sites where adverse impacts would occur according to the following priorities: Aquatic ecosystems; Riparian ecosystems, Riparian areas outside of aquatic and riparian ecosystems. (Manti-La Sal National Forest)
		Minimize surface disturbing activities that alter vegetative cover, result in stream channel instability or loss of channel crosssectional areas, or reduce water quality. (Manti-La Sal National Forest)
		Prior to implementation of project activities, delineate and evaluate riparian areas and or wetlands that may be impacted. FSM 2526. Where site-specific development adversely affects long-term productivity or management, those authorized to conduct development will be required to replace loss through appropriate mitigations. (Manti-La Sal National Forest)
		Obtain 404 permits when needed for proposed activities causing disturbance to floodplains and wetlands. (Manti-La Sal National Forest)
		Prevent or remove unacceptable debris accumulations that reduce stream channel stability and capacity. (Manti-La Sal National Forest)
		Avoid channelization of natural streams. Where channelization is necessary for flood control or other purposes use stream geometry relationships to reestablish meanders, width/depth ratios, etc. consistent with each major stream type. (Manti-La Sal National Forest)
		Treat disturbed sites resulting from resource development or use activities, to reduce sediment yields to the natural erosion rates in the shortest possible time. (Manti-La Sal National Forest)
		Stabilize streambanks which are damaged beyond natural recovery in a reasonable period with appropriate methods or procedures. (Manti-La Sal National Forest)
		Minimize significant soil compaction and disturbance in riparian ecosystems. Allow use of heavy construction equipment during period when the soil is less susceptible to compaction or rutting. (Manti-La Sal National Forest)
		Maintain or enhance the long-term productivity of soils within the riparian ecosystem. (Manti-La Sal National Forest)
		Permit special uses which are complementary and compatible with the kind and level of development within the unit. (Manti-La Sal National Forest)
		Locate new roads and trails outside riparian areas unless alternative routes have been reviewed and rejected. Do not parallel streams when road location must occur in riparian areas except where absolutely necessary. Cross streams at points that best complement riparian and aquatic ecosystems as well as road and stream geometry. Locate crossing (fords) at points of low bank slope and firm surfaces. (Manti-La Sal National Forest)
		Minimize detrimental disturbance to the riparian unit by construction and maintenance activities. Initiate timely and effective rehabilitation of disturbed sites and restore riparian areas so that a vegetation ground cover or suitable substitute protects the soil from erosion and prevents increased sediment yield. (Manti-La Sal National Forest)

Table C.4-2 Manti-La Sal National Forest Standard and Guidelines by Resource

MA	Resource	Description
RPN Riparian Area Management-	Dispersed Recreation Management (A14 and 15)	1) Semi-primitive non-motorized, semi-primitive motorized, roaded natural, and rural recreation opportunities may be provided.
	Special Use Management (Non-recreation) (J01)	1) Permit special uses which are complementary and compatible with the kind and level of development within the unit.
MMA (Leasable Minerals Development) (III-80)	Special Use Management (Non-Recreation) (J01)	1) Coordinate developments that may conflict with the intended purpose of existing or potential units to minimize or eliminate the conflict.
SLD (Special Land Designation) (III-92)	Special Use Management (Non-Recreation) (J01)	1) Approve special-use applications for areas adjacent to existing SLD units only when the proposed use is compatible with the purpose and use of the existing unit.
UC (Utility Corridors) (III-95)	Dispersed Recreation Management (A14 and 15)	1) Manage dispersed recreation opportunities to avoid conflicts with the permitted uses of the unit.
		2) Restrict vehicular travel as appropriate.
	Transportation System Management (L and 20)	1) Avoid the establishment of service roads for maintenance.
	Aquatic	Manage to the extent possible consistent or compatible with wildlife and fish habitat prescriptions from adjacent management units. (Manti-La Sal National Forest)
UDM (Undeveloped Motorized Recreation Sites) (III-52)	Dispersed Recreation Management (A14 and 15)	1) Emphasize semi-primitive non-motorized, semi-primitive motorized, and roaded natural appearing recreation opportunities.
		2) Close specific land areas or travel routes either permanently or seasonally to maintain compatibility with adjacent area management, or prevent resource damage, for economic reasons, to prevent conflicts of use, and provide for user health and safety.
		3) Manage motorized vehicle use (including snowmobiles) on and off Forest Development Roads and Trails. a. Title Code 36 CFR, part 261.
	Special-Use Management (Non recreation) (J01)	1) Permit special uses which are complementary and compatible with the kind and level of development within the unit.
	Transportation System Management (L01 and 20)	1) Design, construct, and maintain roads to assure they are compatible insofar as possible with Undeveloped Motorized Recreation management unit objectives. a. FSM 2300.

C.4.1.3 Fishlake National Forest

References: IRA map; Land and Resource Management Plan for the Fishlake National Forest, 1986.

The following five management areas are within the Project area.

- **2B Rural and Roaded-Natural Recreation Opportunities**: Management emphasis is for rural and roaded-natural recreation opportunities. Motorized and no motorized recreation activities such as driving for pleasure, viewing scenery, picnicking, fishing, snowmobiling, and cross--country skiing are possible. Conventional use of highway-type vehicles is provided for in design and construction of facilities. Motorized travel may be prohibited or restricted to designated routes to protect physical and biological resources. Visual resources are managed so that management activities maintain or improve the quality of recreation opportunities. Management activities are not evident, remain visually subordinate, or may be dominant, but harmonize and blend with the natural setting. Landscape rehabilitation is used to restore landscapes to a desirable visual quality. Enhancement aimed at increasing positive elements of the landscape to improve visual variety is also used. Minimum visual quality objective (VQO) shall be partial retention. Arterial and collector roads and trails are Sensitivity level 1. Permit special uses which are complementary and compatible with the kind and development level of forest service facilities within the area may be permitted.
- **4B Management Indicator Species**: Management emphasis is on the habitat needs of one or more management indicator species. Species with compatible habitat needs are selected for an area. The prescription can be applied to emphasize groups of species, such as early succession dependent or late succession dependent, in order to increase species richness or diversity. Vegetation characteristics and human activities are managed to provide optimum habitat for the selected species, or to meet population goals jointly agreed to with the Utah Division of Wildlife Resources. Recreation and other human activities are regulated to favor the needs of the designated species. Roaded natural recreation opportunities are provided along forest arterial and collector roads. Local roads and trails are either open or closed to public motorized travel. Semi primitive motorized recreation opportunities are provided on those local roads and trails that remain open. Semi-primitive non-motorized opportunities are provided on those that are closed. Investments in other compatible resource uses may occur but will be secondary to habitat requirements. Management activities may dominate in foreground and middleground, but harmonize and blend with the natural setting.
- **5A Big Game Winter Range**: Management emphasis is on winter range for deer, elk, and bighorn sheep if introduced. Treatments are applied to increase forage production of existing grass, forb, and browse species or to alter plant species composition. Investments in compatible resource activities occur. Management activities are not evident, remain visually subordinate, or are dominant in the foreground or middleground but harmonize or blend with the natural setting. Eliminate special uses that conflict with management wintering animals. New roads other than short-term (temporary) roads are located outside of the management area. Short term roads are obliterated within one season after intended use. Selected local roads are closed and motorized recreation use is managed to prevent unacceptable stress on big game animals during the primary big game use season. Minimum VQO shall be modification. Roads cross winter range in the minimum distance feasible. When road construction is allowed, lost wildlife, habitat will be mitigated.
- **6B Livestock Grazing**: Intensive management of range resources through structural and non-structural improvement with associated maintenance Investments are made in compatible resource activities. Dispersed recreational opportunities vary between semi-primitive non motorized and roaded natural. Management activities are evident but harmonize and blend with the natural setting. Minimum VQO shall be modification.
- **9F Improved Watershed Condition**: Management emphasis is on improving watershed condition and thus eliminating the watershed improvement needs backlog. Emphasis is also on maintenance of projects already completed. Management activities in the foreground,

middleground, and background may dominate, but should be designed to harmonize and blend with the natural setting to the extent possible. Motorized travel is prohibited except for over-snow machines and for designated routes. Routes may have seasonal closures.

C.4.1.4 Uinta National Forest

References: IRA map; Land and Resource Management Plan for the Uinta National Forest, May 2003 (Chapter 3, Standards and Guidelines; Chapter 4, Management Prescriptions; Appendix C—Recommended Raptor Buffers; Appendix D—Riparian Habitat Conservation Area Criteria; Correction No. 4, 2003 Uinta National Forest Land and Resource Management Plan, November 27, 2006).

The following seven management areas are within the Project area.

- **3.1 Aquatic, Terrestrial, and Hydrologic Resources**: Emphasis is on maintaining or improving existing quality aquatic, terrestrial, and hydrologic conditions through limited to moderate management activity. This prescription includes areas where multiple habitat and resource values are present. These values are recognized as important and may require restoration to reach desired conditions. Other uses and activities may be allowed provided they do not inhibit attainment of objectives for the areas. Vegetation management activities, including timber harvest, may be used to address vegetation needs for wildlife habitat, watershed improvement, and/or forest health needs. Additional motorized trails may be constructed. Livestock grazing is allowed where compatible with desired aquatic, terrestrial, and hydrologic conditions. Leasing stipulations are CSU for all areas except, semi-primitive non-motorized, which is NSO.
- **3.3 Aquatic and Terrestrial Habitat**: These areas are managed for quality habitat to contribute toward maintenance and/or recovery of plant and animal species. Resources are maintained or improved to achieve desired conditions for habitats of threatened, endangered, sensitive, and Management Indicator Species (MIS). Most, but not all, of the critical deer and elk winter range is included within this prescription. This prescription applies to areas with multiple habitats (big game winter range, Lynx Analysis Units [LAUs], greater sage grouse habitat in the Vernon and Strawberry Reservoir Management Areas, etc.). Where habitats overlap, the most restrictive standard or guideline will take precedence. No additional winter recreation facilities may be constructed in the areas of this prescription managed as Lynx Analysis Units (LAUs). Leasing stipulations are TL/CSU for all areas except, semi-primitive non-motorized, which is NSO.
- **4.4 Dispersed Recreation**: The emphasis in this prescription is on providing opportunities for and/or facilitating dispersed recreation. This management prescription includes areas of existing or anticipated concentrations of recreational use. Intensive vegetation management may be required to maintain desired conditions. Additional motorized trails may be constructed. Development is limited to a level that facilitates the dispersed recreation experience and addresses resource impacts. Leasing stipulations are TL/CSU for all areas except, semi-primitive non-motorized, which is NSO.
- **5.1 Forested Ecosystems – Limited Development**: Emphasis is on maintaining or restoring vegetation to achieve multiple resource values. Additional motorized trails may be constructed. Management of forested ecosystems enhances wildlife habitats, improves watershed stability, and improves vegetative diversity. Management encompasses the full range of land and resource treatment activities. Additional motorized trails may be constructed. Grazing by livestock is allowed, but forage production for livestock use is limited to meet requirements for wildlife, riparian, water quality, or other objectives. Leasing stipulations are CSU for all areas except, semi-primitive non-motorized, which is NSO.
- **5.2 Forested Areas -Vegetation Management**: Emphasis is on maintaining or restoring vegetation to achieve multiple resource values and provide for multiple uses. Management area direction also includes timber resource goals and objectives, but achievement of high yields is not the primary purpose. The Forest's suitable timber base is located within this management prescription. Timber volumes harvested are applied to

the Forest's allowable sale quantity (ASQ). Management encompasses the full range of activities and uses. Road densities and designs are compatible with multiple resource values. Additional motorized trails may be constructed. Recreation and other developments requiring the construction and reconstruction of roads and trails will be considered.

- **6.1 Non-forested Ecosystems**: Emphasis is on maintaining or restoring vegetation conditions to achieve ecosystem health. Additional motorized trails may be constructed. Standard lease terms for all ROS except for semi-primitive non-motorized (NSO) and semi-primitive motorized (CSU).
- **8.2 Utility Corridor/Communication Sites**: Features in these areas may include various non-recreation special uses such as utility corridors or communication sites allocated for long-term site investment. Vegetation management should be limited to activities consistent with installation and maintenance of the utility line or communication site and mitigation against potential erosion and visual quality impacts. Recreation use is limited to incidental dispersed use, such as a trail crossing through the area. Public access restrictions may be imposed within energy transmission, utility, and communication corridors and sites for health, safety, or resource considerations, or to be compatible with management direction for surrounding areas. CSU for all leasing. See other management areas for surrounding area stipulations.

Table C.4-3 Uinta National Forest No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Special Designations-IRA		#418028	Inventoried Roadless Area where road construction or reconstruction is allowed	CSU	No buffer
Special Designations-IRA		#418008 Chipman Creek	Inventoried Roadless Area where road construction or reconstruction is allowed	CSU	No buffer
Special Designations-IRA		#418009	Inventoried Roadless Area where road construction or reconstruction is allowed	CSU	No buffer
Special Designations-IRA		#418017	Inventoried Roadless Area where road construction or reconstruction is allowed	CSU	No buffer
Water Resources		Riparian habitat conservation areas (RHCA)	300-foot buffers long perennial streams identified as recovery streams for Bonneville or Colorado River cutthroat trout, regardless of the area's management prescription (class I)	NSO	300 feet
Water Resources		Riparian habitat conservation areas (RHCA)	300-foot buffer along perennial streams with adjacent populations of Ute ladies'-tresses (*Spiranthes diluvialis*). (Class I)	NSO	300 feet
Water Resources		Riparian habitat conservation areas (RHCA)	300-foot buffer associated with major drainages where volumes of base water flows are at least 10 cubic feet per second (cfs). (Class I)	NSO	300 feet
Water Resources		Riparian habitat conservation areas (RHCA)	200-foot buffer along perennial waterbodies within management prescription 3.1, Aquatic, Terrestrial, and Hydrologic Resources, not previously classified as a Class I RHCA. (Class I)	NSO	200 feet
Water Resources		Riparian habitat conservation areas (RHCA)	300-foot buffer for areas identified as a locally significant sport fishery, or provides important fish spawning habitat for reservoirs, or high riparian or fisheries potential. (class III_	NSO	300 feet
Water Resources		Riparian habitat conservation areas (RHCA)	200-foot buffer for areas with moderate sport fishery, or moderate to high riparian or fisheries potential. (Class II)	NSO	200 feet

Table C.4-3 Uinta National Forest No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Water Resources		Riparian habitat conservation areas (RHCA)	200-foot buffer for areas associated with drainages where volumes of base water flows are 3 to 10 cfs. (Class II)	NSO	200 feet
Water Resources		Riparian habitat conservation areas (RHCA)	300-foot buffer for water resources used directly for culinary or municipal water. (class I)	NSO	300 feet
Water Resources		Riparian habitat conservation areas (RHCA)	300-foot buffer for areas within management prescription 2.1, Wild and Scenic Rivers - Wild, 2.2, Wild and Scenic Rivers - Scenic, 2.3, Wild and Scenic Rivers - Recreational, 2.4, Research Natural Areas, 1.4, Wilderness, or 1.5, Recommended Wilderness. (class I)	NSO	300 feet
Water Resources		Riparian habitat conservation areas (RHCA)	200-foot buffer along waterbodies that are used indirectly for culinary or municipal water, or could indirectly affect management prescriptions 2.1, Wild and Scenic Rivers - Wild, 2.2, Wild and Scenic Rivers - Scenic, 2.3, Wild and Scenic Rivers - Recreational, 2.4, Research Natural Areas, 1.4, Wilderness, or 1.5, Recommended Wilderness. (class II)	NSO	200 feet
Water Resources		Riparian habitat conservation areas (RHCA)	300-foot riparian buffer within or directly adjacent to an outstanding local recreational resource (i.e., one that is significant to recreation users throughout northern Utah and is a destination site). (Class I)	NSO	300 feet
Water Resources		Riparian habitat conservation areas (RHCA)	200-foot riparian buffer for water resources within or directly adjacent to a moderately important local recreational resource (i.e., most recreation users do not typically travel great distances to use this resource). (Class II)	NSO	200 feet
Water Resources		Riparian habitat conservation areas (RHCA)	300-foot riparian buffer for areas containing critical or limiting habitat for threatened or endangered species. (Class III)	NSO	300 feet
Water Resources		Riparian habitat conservation areas (RHCA)	300-foot riparian buffer for areas containing limiting habitat for a dependent Management Indicator Species (MIS). (Class III)	NSO	300 feet
Water Resources		Riparian habitat conservation areas (RHCA)	200-foot riparian buffer for areas s characterized by excellent vertical and horizontal diversity as representative of the surrounding vegetation community. (Class II)	NSO	200 feet
Water Resources		Riparian habitat conservation areas (RHCA)	200-foot riparian buffer for areas with Forest Service sensitive species. (class II)	NSO	200 feet
Water Resources		Riparian habitat conservation areas (RHCA)	100-foot buffer for all perennial waterbodies not identified as Class I or Class II areas, and lands adjoining wetlands greater than one acre in size. (Class III)	NSO	100 feet
Water Resources		Riparian habitat conservation areas (RHCA)	100-foot buffer for all lands that lie within 50 feet of seasonally flowing or intermittent streams, and wetlands less than one acre in size. (Class III)	NSO	100 feet
Wildlife-Raptors	California condor	Nests	No surface disturbance within a 1 mile buffer of active nests.	NSO	1 mile
Wildlife-SSS	Sage grouse	Leks	Locate energy transmission, mining, or other large structures and facilities that could be used as perch sites for raptors at least two miles from greater sage grouse leks	NSO	2 miles
Land Use		Deseret generating and transmission utility corridor	Corridor is limited to the right-of-way for currently permitted power transmission facilities. Any additional power will be accommodated on existing facilities or upgraded facilities.	CSU	No buffer

Table C.4-3 Uinta National Forest No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Geology		Caves	If there is a potential for causing damage to a known cave, restrict ground-disturbing activities such as the use of heavy equipment or blasting above or in the vicinity of a known cave, or within a drainage that empties into a known cave. Alteration or redirection of natural surface drainage into or away from known caves should not be allowed. Retain vegetation within 50 feet of a known cave or above a known cave if the vegetation protects the cave's microenvironment (e.g., hydrology, habitat, climate, vegetation).	CSU	No buffer
Wildlife-Sage Grouse		Greater sage-grouse nesting habitats in the Vernon and Strawberry Reservoir Management Areas	Avoid removing sagebrush cover within 300 yards of foraging area of greater sage grouse foraging areas along riparian zones, meadows, lakebeds, and farmland.	CSU	No buffer
Wildlife-Sage Grouse		Greater sage-grouse leks and habitat	Avoid building power lines and other tall structures that could become potential perch sites for raptors within two miles of greater sage grouse habitats (nesting, brood-rearing, and winter) in the Vernon and Strawberry Reservoir Management Areas. Bury power lines or, if structures must be built or currently exist, modify the structures to prevent raptors from using the structures.	CSU	2 miles
Land Use-Management Areas		3.1 Aquatic, Terrestrial, and Hydrologic Resources	Emphasis is on maintaining or improving existing quality aquatic, terrestrial, and hydrologic conditions through limited to moderate management activity. This prescription includes areas where multiple habitat and resource values are present. These values are recognized as important and may require restoration to reach desired conditions. Other uses and activities may be allowed provided they do not inhibit attainment of objectives for the areas. Vegetation management activities, including timber harvest, may be used to address vegetation needs for wildlife habitat, watershed improvement, and/or forest health needs. Additional motorized trails may be constructed. Livestock grazing is allowed where compatible with desired aquatic, terrestrial, and hydrologic conditions. Leasing stipulations are CSU for all areas except, semi-primitive non-motorized, which is NSO.	CSU	No buffer
Land Use-Management Areas		3.3 Aquatic and Terrestrial Habitat	These areas are managed for quality habitat to contribute toward maintenance and/or recovery of plant and animal species. Resources are maintained or improved to achieve desired conditions for habitats of threatened, endangered, sensitive, and Management Indicator Species (MIS). Most, but not all, of the critical deer and elk winter range is included within this prescription. This prescription applies to areas with multiple habitats (big game winter range, Lynx Analysis Units [LAUs], greater sage grouse habitat in the Vernon and Strawberry Reservoir Management Areas, etc.). Where habitats overlap, the most restrictive standard or guideline will take precedence. No additional winter recreation facilities may be constructed in the areas of this prescription managed as Lynx Analysis Units (LAUs). Leasing stipulations are TL/CSU for all areas except, semi-primitive non-motorized, which is NSO.	CSU	No buffer
Land Use-Management Areas		4.4 Dispersed Recreation	The emphasis in this prescription is on providing opportunities for and/or facilitating dispersed recreation. This management prescription includes areas of existing or anticipated concentrations of recreational use. Intensive vegetation management may be required to maintain desired conditions. Additional motorized trails may be constructed. Development is limited to a level that facilitates the dispersed recreation experience and addresses resource impacts. Leasing stipulations are TL/CSU for all areas except, semi-primitive non-motorized, which is NSO.	CSU	No buffer

Table C.4-3 Uinta National Forest No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Land Use-Management Areas		5.1 Forested Ecosystems – Limited Development	Emphasis is on maintaining or restoring vegetation to achieve multiple resource values. Additional motorized trails may be constructed. Management of forested ecosystems enhances wildlife habitats, improves watershed stability, and improves vegetative diversity. Management encompasses the full range of land and resource treatment activities. Additional motorized trails may be constructed. Grazing by livestock is allowed, but forage production for livestock use is limited to meet requirements for wildlife, riparian, water quality, or other objectives. Leasing stipulations are CSU for all areas except, semi-primitive non-motorized, which is NSO.	CSU	No buffer
Land Use-Management Areas		5.2 Forested Areas - Vegetation Management	Emphasis is on maintaining or restoring vegetation to achieve multiple resource values and provide for multiple uses. Management area direction also includes timber resource goals and objectives, but achievement of high yields is not the primary purpose. The Forest's suitable timber base is located within this management prescription. Timber volumes harvested are applied to the Forest's allowable sale quantity (ASQ). Management encompasses the full range of activities and uses. Road densities and designs are compatible with multiple resource values. Additional motorized trails may be constructed. Recreation and other developments requiring the construction and reconstruction of roads and trails will be considered.	CSU	No buffer
Land Use-Management Areas		6.1 Non-forested Ecosystems	Emphasis is on maintaining or restoring vegetation conditions to achieve ecosystem health. Additional motorized trails may be constructed. Standard lease terms for all ROS except for semi-primitive non-motorized (NSO) and semi-primitive motorized (CSU).	CSU	No buffer
Land Use-Management Areas		8.2 Utility Corridor/Communication Sites	Features in these areas may include various non-recreation special uses such as utility corridors or communication sites allocated for long-term site investment. Vegetation management should be limited to activities consistent with installation and maintenance of the utility line or communication site and mitigation against potential erosion and visual quality impacts. Recreation use is limited to incidental dispersed use, such as a trail crossing through the area. Public access restrictions may be imposed within energy transmission, utility, and communication corridors and sites for health, safety, or resource considerations, or to be compatible with management direction for surrounding areas. CSU for all leasing. See other management areas for surrounding area stipulations.	CSU	No buffer
Special Designation Areas		Research natural areas	No specific restrictions for transmission lines, but no road construction is allowed. NSO to mineral development. Vegetation management activities are only allowed when necessary to help perpetuate the unique and/or representative ecosystem.	CSU	No buffer
Water		Riparian habitat conservation areas (RHCA)	Road crossings and other structures should not disrupt the migration or other movement of aquatic organisms inhabiting the water body unless a barrier is desired to protect specific species.	CSU	No buffer
Wildlife-Aquatic Species	Bonneville cutthroat trout	Tie Fork	Bonneville cutthroat trout could potentially occur in Tie Fork. Avoid management actions could reduce riparian habitat or retard recovery of the species. Unspecified restrictions could exist. For streams identified as conservation and persistence streams for Bonneville and Colorado River cutthroat trout, total soil resource commitment should be limited to no more than 4 percent of the riparian area acreage within this prescription within the watershed.	CSU	No buffer

Table C.4-3 Uinta National Forest No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Wildlife-Aquatic Species	Colorado River cutthroat trout	Willow Creek	Colorado River cutthroat trout potentially could occur in Tie Fork and Willow Creek. Avoid management actions could reduce riparian habitat or retard recovery of the species. Unspecified restrictions could exist. Willow creek is within the North Tavaputs Plateau Subunit of the Northeastern GMU (Conservation Plan, UDWR 1997b, p. 39). For streams identified as conservation and persistence streams for Bonneville and Colorado River cutthroat trout, total soil resource commitment should be limited to no more than 4 percent of the riparian area acreage within this prescription within the watershed.	CSU	No buffer

Table C.4-4 Uinta National Forest Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Raptors	Bald eagle	Nests	No surface disturbance within a 1 mile buffer of active nests from 1/1 – 8/31.	TL	1/1 to 8/31	1 mile
Wildlife-Raptors	Boreal owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 2/1 – 7/31.	TL	2/1 to 7/31	0.25 mile
Wildlife-Raptors	Burrowing owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.25 mile
Wildlife-Raptors	Northern saw-whet owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.25 mile
Wildlife-Raptors	Mexican spotted owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.25 mile
Wildlife-Raptors	Cooper's hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Red-tailed hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Sharp-shinned hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/15 – 8/31.	TL	3/15 to 8/31	0.5 mile
Wildlife-Raptors	Ferruginous hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/1.	TL	3/1 to 8/1	0.5 mile
Wildlife-Raptors	Flammulated owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 9/30.	TL	4/1 to 9/30	0.25 mile
Wildlife-Raptors	Golden eagle	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 1/1 – 8/31.	TL	1/1 to 8/31	0.5 mile
Wildlife-Raptors	Great horned owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 12/1 – 9/31.	TL	12/1 to 9/31	0.25 mile
Wildlife-Raptors	Long-eared owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 2/1 – 8/15.	TL	2/1 to 8/15	0.25 mile
Wildlife-Raptors	Merlin	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.5 mile
Wildlife-Raptors	Osprey	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.5 mile
Wildlife-Raptors	Northern goshawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/15.	TL	3/1 to 8/15	0.5 mile
Wildlife-Raptors	Northern harrier	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 4/1 – 8/15.	TL	4/1 to 8/15	0.5 mile
Wildlife-Raptors	Northern pygmy owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 8/1.	TL	4/1 to 8/1	0.25 mile
Wildlife-Raptors	Peregrine falcon	Nests	No surface disturbance within a 1 mile buffer of active nests from 2/1 – 8/31.	TL	2/1 to 8/31	1 mile

Table C.4-4 Uinta National Forest Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Raptors	Prairie falcon	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 4/1 – 8/31.	TL	4/1 to 8/31	0.25 mile
Wildlife-Raptors	Short-eared owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/1.	TL	3/1 to 8/1	0.25 mile
Wildlife-Raptors	Swainson's hawk	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 3/1 – 8/31.	TL	3/1 to 8/31	0.5 mile
Wildlife-Raptors	Western screech owl	Nests	No surface disturbance within a 0.25 mile buffer of active nests from 3/1 – 8/15.	TL	3/1 to 8/15	0.25 mile
Wildlife-Raptors	Turkey vulture	Nests	No surface disturbance within a 0.5 mile buffer of active nests from 5/1 – 8/15.	TL	5/1 to 8/15	0.5 mile
Wildlife	Three-toed woodpecker	30 -acre nest areas	Vegetation manipulation is prohibited from 4/15 – 9/1 in 30-acre nest areas.	TL	4/15 to 9/1	30-acre nest areas.
Wildlife-Raptors	Northern goshawk	420-acre Post-Fledgling Areas	In active Post-Fledgling Area (PFA), for goshawks, restrict all Forest Service management activities (including vegetation manipulation) and permitted uses, except livestock grazing, during the active nesting season (normally from March 1 to September 30) unless it is determined that the disturbance is not likely to result in nest abandonment. A PFA should be approximately 420 acres in size (exclusive of nest area acres) when sufficient suitable habitat exists.	TL	3/1 to 8/15	420-acre PFAs
T&E Species	Greater sage-grouse-Strawberry population	Leks	Adjust timing and location of activities to minimize disturbance of greater sage-grouse breeding sites in the Vernon and Strawberry Reservoir Management Areas. Activities should not take place within sight distance or 0.5 miles of leks (whichever is less) annually from March 1 to June 15.	TL	3/1 to 6/15	0.5 mile or sight distance, whichever less
Wildlife-Big Game	Elk	Critical elk winter range	Classified roads not needed for through travel, or that do not provide access to an active project or a designated recreation destination (e.g., cross-country ski and snowmobile trailheads) should be closed from December 1 to March 30. If classified roads are open to through travel or provide access to recreation destinations (e.g., cross-country ski and snowmobile trail heads), they should be designed, constructed, and managed to accommodate passenger car traffic and snow removal.	TL	12/1 to 3/30	No buffer
Wildlife	Boreal toad	Known habitat	Protect known boreal toad habitat from disturbance during the active breeding season (4-5 weeks following snowmelt).	TL	None given	No buffer

C.4.1.5 Dixie National Forest, Utah

References: IRA map; Land and Resource Management Plan for the Dixie National Forest, 1986 (Chapter IV, Forest Management Direction, IV-6); Goshawk Plan Amendment

The following seven management areas are within the Project area.

- **1-General Forest Direction**: Forest-wide general management standards and guidelines apply in this area.
- **2b Roaded Natural Recreation**: Management emphasis is for rural and roaded-natural recreation opportunities. Motorized and non-motorized recreation activities such as driving for pleasure, viewing scenery, picnicking, fishing, snowmobiling, and cross-country skiing are possible. Conventional use of highway-type vehicles is provided for in design and construction of facilities. Motorized travel may be prohibited or restricted to designated routes, to protect physical and biological resources. Visual resources are managed so that management activities maintain or improve the quality of recreation opportunities. Management activities are not evident, remain visually subordinate, or may be dominant, but harmonize and blend with the natural setting. Landscape rehabilitation is used to restore landscapes to a desirable visual quality. Enhancement aimed at increasing positive elements of the landscape to improve visual variety is also used.
- **4c Wildlife Habitat - Brushy Range**: Management emphasis is on wildlife habitat in hardwood and shrub-dominated draws and other areas of woody vegetation to sustain their inherent biological, physical, and visual values. Recreational opportunities vary between semi-primitive non-motorized and roaded natural. Management activities may dominate in foreground or middle ground but harmonize and blend in the natural setting. Do not go below VQO of modification. Recreation should not conflict with habitat needs of MIS. Semi-primitive non-motorized, semi-primitive motorized.
- **5a Big-Game Winter Range**: Management emphasis is on winter range for deer, elk, and pronghorn. Treatments are applied to increase forage production of existing grass, forb, and browse species or to alter plant species composition. Investments in compatible resource activities occur. Management activities are not evident, remain visually subordinate, or are dominant in the foreground or middleground but harmonize or blend with the natural setting. New roads other than short-term (temporary) roads are located outside of the management area. Short-term roads are obliterated within one season after intended use. Existing roads are closed and new motorized recreation use is managed to protect unacceptable stress on big game during the primary big game season. Design and implement management activities to blend with the natural landscape Do not go below VQO of modification.
- **6a Livestock Grazing**: The area is managed for livestock grazing through structural and non-structural improvement with associated maintenance Investments are made in compatible resource activities. Dispersed recreational opportunities vary between semi-primitive nonmotorized and roaded natural. Management activities are evident but harmonize and blend with the natural setting. Minimum VQO shall be modification. Design and implement management activities to blend with the natural landscape. Do not go below VQO of modification. When project require clearing of vegetation and/or soils disturbances, use irregular clearing edges and shaped to blend with the natural landscape. Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in subalpine and other ecosystems where needed to protect soils, vegetation, or special wildlife habitat.
- **9a Riparian Management**: The goals of management are to provide healthy, self-perpetuating plant communities, meet water quality standards, provide habitats for viable populations of wildlife and fish, and provide stable stream channels and still water body shorelines. The aquatic ecosystem may contain fisheries habitat improvement and channel stabilizing facilities that harmonize with the visual setting and maintain or improve wildlife or fish habitat. Management area is located adjacent to perennial streams and across the forest. Includes aquatic ecosystems. Riparian ecosystem and adjacent eco systems that are within 100 from edges of perennial streams and other waterbodies. Developed recreation restricted/modified within 100-year floodplain. Minimum VQO shall be partial retention.

- **10B Municipal Water Supply Watersheds**: Management emphasis is to protect or improve the quality and quantity of municipal water supplies. Management practices are modified. Allow motorized travel only on established roads and trails. Close watershed to all travel when the road or trail surfaces could be damaged to the degree that water quality would be degraded. Generally roads are not permitted. VQO of retention. Immediately rehabilitate man-caused disturbances and restore burned areas. Inspect rehabilitated areas annually and provide maintenance necessary to protect the watershed. Within riparian areas apply management direction in riparian area management prescription except as amended by the direction in this prescription. Use Chapter 6 of State of Utah Public Drinking Water regulations as a guide. Provide for special protection zone within 1,500 feet up gradient and 100 feet down gradient of spring sources of Municipal water supplies.

Table C.4-5 Dixie National Forest No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Land Use-Management Areas		1-General Forest Direction	Forest-wide general management standards and guidelines apply in this area.	CSU	No buffer
Land Use-Management Areas		2b Roaded Natural Recreation 131,700 acres.	Management emphasis is for rural and roaded-natural recreation opportunities. Motorized and non-motorized recreation activities such as driving for pleasure, viewing scenery, picnicking, fishing, snowmobiling, and cross-country skiing are possible. Conventional use of highway-type vehicles is provided for in design and construction of facilities. Motorized travel may be prohibited or restricted to designated routes, to protect physical and biological resources. Visual resources are managed so that management activities maintain or improve the quality of recreation opportunities. Management activities are not evident, remain visually subordinate, or may be dominant, but harmonize and blend with the natural setting. Landscape rehabilitation is used to restore landscapes to a desirable visual quality. Enhancement aimed at increasing positive elements of the landscape to improve visual variety is also used.	CSU	No buffer
Land Use-Management Areas		4c Wildlife Habitat - Brushy Range 72,900 acres.	Management emphasis is on wildlife habitat in hardwood and shrub-dominated draws and other areas of woody vegetation to sustain their inherent biological, physical, and visual values. Recreational opportunities vary between semi-primitive non-motorized and roaded natural. Management activities may dominate in foreground or middle ground but harmonize and blend in the natural setting. Do not go below VQO of modification. Recreation should not conflict with habitat needs of MIS. Semi-primitive non-motorized, semi-primitive motorized.	CSU	No buffer
Land Use-Management Areas		5a Big-Game Winter Range	Management emphasis is on winter range for deer, elk, and pronghorn. Treatments are applied to increase forage production of existing grass, forb, and browse species or to alter plant species composition. Investments in compatible resource activities occur. Management activities are not evident, remain visually subordinate, or are dominant in the foreground or middleground but harmonize or blend with the natural setting. New roads other than short-term (temporary) roads are located outside of the management area. Short term roads are obliterated within one season after intended use. Existing roads are closed and new motorized recreation use is managed to protect unacceptable stress on big game during the primary big game season. Design and implement management activities to blend with the natural landscape Do not go below VQO of modification.	CSU	No buffer

Table C.4-5 Dixie National Forest No Surface Use and Controlled Surface Use Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Buffer/ Avoidance Area
Land Use-Management Areas		6a Livestock Grazing	The area is managed for livestock grazing through structural and non-structural improvement with associated maintenance Investments are made in compatible resource activities. Dispersed recreational opportunities vary between semi-primitive nonmotorized and roaded natural. Management activities are evident but harmonize and blend with the natural setting. Minimum VQO shall be modification. Design and implement management activities to blend with the natural landscape. Do not go below VQO of modification. When project require clearing of vegetation and/or soils disturbances, use irregular clearing edges and shaped to blend with the natural landscape. Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in subalpine and other ecosystems where needed to protect soils, vegetation, or special wildlife habitat.	CSU	No buffer
Land Use-Management Areas		9a Riparian Management	The goals of management are to provide healthy, self-perpetuating plant communities, meet water quality standards, provide habitats for viable populations of wildlife and fish, and provide stable stream channels and still water body shorelines. The aquatic ecosystem may contain fisheries habitat improvement and channel stabilizing facilities that harmonize with the visual setting and maintain or improve wildlife or fish habitat. Management area is located adjacent to perennial streams and across the forest. Includes aquatic ecosystems. Riparian ecosystem and adjacent eco systems that are within 100 from edges of perennial streams and other waterbodies. Developed recreation restricted/modified within 100-year floodplain. Minimum VQO shall be partial retention.	CSU	No buffer
Land Use-Management Areas		10B Municipal Water Supply Watersheds	Management emphasis is to protect or improve the quality and quantity of municipal water supplies. Management practices are modified. Allow motorized travel only on established roads and trails. Close watershed to all travel when the road or trail surfaces could be damaged to the degree that water quality would be degraded. Generally roads are not permitted. VQO of retention. Immediately rehabilitate man-caused disturbances and restore burned areas. Inspect rehabilitated areas annually and provide maintenance necessary to protect the watershed. Within riparian areas apply management direction in riparian area management prescription except as amended by the direction in this prescription. Use Chapter 6 of State of Utah Public Drinking Water regulations as a guide. Provide for special protection zone within 1,500 feet up gradient and 100 feet down gradient of spring sources of Municipal water supplies.	CSU	No buffer

Table C.4-6 Dixie National Forest Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Big Game	All	Critical winter ranges	Restrict or eliminate vehicular traffic (including over-the-snow vehicles) from November 1 through May 1 on identified critical winter ranges.	TL	11/ to 5/1	No buffer

Table C.4-6 Dixie National Forest Timing Restrictions

Resource	Species (if Applicable)	Area of Restriction	Description	Constraint Type	Timing	Buffer/ Avoidance Area
Wildlife-Northern Goshawk	Northern goshawk	Active nest areas	In active nest areas (approximately 30 acres; i.e. *Guideline n.*), restrict Forest Service management activities and human uses for which Forests issue permits during the active nesting period (does not include livestock permits) unless it is determined that the disturbance is not likely to result in nest abandonment. The active nesting period will normally occur between March 1st and September 30th. If the disturbance is likely to result in abandonment, a biological evaluation (BE) must be completed. To implement the action the BE must conclude that the action is consistent with the intent of the Conservation Strategy and Agreement for Management of the Northern Goshawk in Utah.	TL	3/1 to 9/30	No buffer

C.5 Additional Mitigation Measures Prescribed for the TWE Project

Table C.5-1 Mitigation Measures

Draft EIS Mitigation Measure Number	Mitigation Measures
Climate and Air Quality	
AQ-1	In Region II, the Alternative B transmission line route passes within about 10 miles of Arches NP. No concrete batch plants would be located within 30 miles of NP; therefore, concrete required for structure foundations should be acquired from local sources in the vicinity of Moab.
AQ-2	In Region III, the Proposed Action (Alternative A) passes within about 20 miles of Zion N P. No concrete batch plants would be located within 30 miles of NP; therefore, concrete required for structure foundations should be acquired from local sources in the vicinity of Cedar City or St. George, Utah.
AQ-3	The Clark County nonattainment area is located in both Region III and Region IV. No new concrete batch plants are to be located within the nonattainment area; concrete required for structure foundations and other construction are to be acquired from existing local vendors.
Geological, Paleontological, and Mineral Resources	
GE-1	In areas with geologic hazards (e.g., ground shaking, liquefaction, landslides, subsidence from karst, groundwater withdrawal, underground mining, historic mining) and active mining; placement of project structures and other project related disturbance would be avoided to the extent practical. Where avoidance is not possible a site specific geotechnical investigation and engineering design would be implemented during construction and operation of the Project. Depending on the type of potential geologic hazards, the designs may vary and should address specific needs for enhanced structural supports. Site specific assessment of geologic hazards shall include review of available information concerning areas of hazards, and consultation with appropriate governmental agency (USFS, BLM, UGS, USGS) personnel who are knowledgeable about the hazards. Assessment also shall include, if necessary, field surveys and gathering of geotechnical information to determine what engineering design methods would mitigate or lessen potential risks. If active mines cannot be avoided, applicant will conduct similar due diligence in regard to hazards from underground and historic mining to ensure that project facilities will not hinder access to mineral resources or create dangers to mining activities.
Soil Resources	
S-1	Where permanent facilities or structures would be located, the entire topsoil horizon would be salvaged for use in reclamation, prior to surface disturbance. Topsoil would be spread evenly around the permanent structure (not left in piles) and revegetated for future use.
S-2	Construction, excavation, or re-spreading with frozen or saturated soils is prohibited.
S-3	During reclamation, compacted areas (typically any area that receives repeated traffic or 3 or more passes by heavy equipment) will be decompacted, to the depth of compaction, by subsoiling, paraplowing, or parabolic ripping on the contour to the depth of compaction. This would help prepare the seed bed, encourage infiltration and help to prevent accelerated runoff and erosion. Scarification would only be used on shallow soils. Compaction depth would be determined on a case by case basis, by a qualified environmental inspector or soil scientist.
S-4	During decommissioning, where a soil sterilizer has been applied, sterile soils will be removed prior to the replacement of topsoil and seeding.
S-5	Surface activities are prohibited when soils or road surfaces become saturated to a depth of 3 inches or less if mixing of the topsoil and subsoil will occur or the soil surface becomes unsafe for vehicular travel.
S-6	During construction, erosion control measures will be inspected after every storm event and maintained.
S-7	Permanent access roads will not be constructed on slopes over 25 percent.

Table C.5-1 Mitigation Measures

Draft EIS Mitigation Measure Number	Mitigation Measures
S-8	Temporary and permanent access roads will be gated to restrict motorized use by the public. In some instances, other methods may need to be employed to prevent public access. After construction is complete, permanent access roads would remain gated at the land management agency or landowner's discretion. If the road is no longer needed for operations, it would be obliterated with the following procedures: Remove all stream crossings and restore stream banks to natural contours; Reestablish natural drainage patterns; Decompact the road surface by subsoiling along the entire disturbed length; Recontour the road prism to the original land contours; Seed with an agency or landowner approved seed mixture. Gates and closure signage should be left in place until adequate regeneration/rehabilitation occurs.
S-9	Excess subsoil that is excavated for foundations will not be spread on the soil surface (on top of topsoil) or on access roads. Excess subsoil would be disposed of in accordance with federal, state, and local requirements.
S-10	Prime farmlands will be avoided to the extent possible for permanent project facilities and structure foundations.
S-11	Permanent erosion control measures will be installed on all project access roads used for operations and maintenance. Erosion control measures will be inspected and maintained bi-annually.
S-12	All concrete foundations will be removed during decommissioning, unless they are permanently anchored into stable bedrock.
S-13	Follow-up seeding using native seed or corrective erosion control measures are required on areas of surface disturbance that experience reclamation failure.
S-14	TWE would avoid constructing in areas of unstable soils prone to slumping or mass wasting. Prior to construction, a hazard plan would be developed by TWE depicting the landslide-prone avoidance areas. This Plan would be included in the POD submitted to the agencies for approval prior to the Notice to Proceed.
Water Resources	
WR-1	Use of existing stream crossings would be utilized wherever requested by agencies. This would be developed on a site-specific basis during POD development.
WR-2	When existing crossings were not used, drive through (Arizona) crossings would not be utilized when un-protected (bare soil) streambeds are wet or when the stream is flowing water. This additional mitigation would reduce erosion and stream stability by limiting the crossing during times when the soil is highly susceptible to erosion.
Vegetation	
NX-1	The noxious weed management plan to be developed as part of the Construction, Operation and Maintenance (COM) would include the following: Pre-construction surveys for noxious weeds in the footprints of the ROW, access roads, and ancillary facilities, Pre-construction weed control, Education of construction and operation personnel in each project region, Washing of vehicles and equipment before entering and leaving the ROW, Herbicide spraying, and Annual monitoring and reporting. Survey information collected during pre-construction surveys would include species name, global positioning system location of weed infestations, percent cover, and approximate size of weed infestations. Control of noxious and invasive species could include chemical, physical, and biological methods and will be developed in consultation with the land agencies and private landowners. The plan will identify species of concern for each BLM FO and USFS Forest, and focus monitoring and control methods on these species. The plan would comply with the existing BLM, USFS, USFWS, state and federal regulations concerning noxious weed management.

Table C.5-1 Mitigation Measures

Draft EIS Mitigation Measure Number	Mitigation Measures
NX-2	Herbicide spraying would be conducted following all applicable state and federal laws regarding chemical use, adverse weather, chemical storage, and chemical drift. Further guidelines and protocols for herbicide spraying on BLM land is provided in the Final BLM Vegetation Treatment Using Herbicides Programmatic EIS (BLM Vegetation EIS) (BLM 2007f). Standard operating procedures for herbicide spraying include buffers for sensitive areas such as riparian and wetland areas and threatened and endangered species habitat, timing restrictions, and safety protocols.
NX-3	On lands managed by the BLM, an approved Pesticide Use Proposal (PUPs) would be obtained from each BLM FO prior to herbicide spraying. PUPs would have site-specific information about the herbicides to be used. The PUPs and associated reporting requirements would be submitted on the schedule required for each BLM FO. Herbicide spraying in desert tortoise habitat in Nevada would require consultation with the BLM and USFWS.
NX-4	The cut-stumps of mature salt cedar stands that are cut as part of vegetation clearing will be immediately painted with herbicides. The specific control methods, and herbicide to be used will be determined in consultation with the Nevada BLM State and FO offices. Additional control measures could the planting of native or desired plant species following treatment to provide erosion control, and the use of biocontrols.
VG-1	Native seed mixes to be used for reclamation would be developed in consultation with the land managers for the various regions crossed by the Project. Seed mixes would meet the requirements of the individual agency FO's crossed by the Project. Site-specific seed mixes for soils with low reclamation potential (LRP) would be developed. The LRP seed mixes would be specifically designed for alkaline, saline, or sodic soils and would be used in areas where reclamation would potentially be difficult based on soil conditions. Additional soil amendments may be required in these areas, and would be implemented at the direction of the land manager.
VG-2	Woody areas such as pinyon-juniper, which are on average taller than the 6 ft minimum clearance, but with wide spacing between the trees allowing vehicle and equipment access to the transmission line ROW, would not be cleared during construction activities. This measure would consider conductor clearance requirements.
VG-3	A vegetation reclamation and monitoring plan will be developed as part of the Construction, Operation, and Maintenance (COM). The reclamation monitoring plan would define reclamation success for each land management agency, list reclamation seed mixes, and detail reclamation monitoring for both interim and final reclamation. Interim and final reclamation success would be monitored quarterly for the first year, and then annually for at least three years, or until reclamation success as defined by each land management agency crossed by the project is achieved. Reporting of construction, reclamation progress, and monitoring results would be submitted to each land management agency per each office's reporting requirements.
VG-4	During vegetation clearing, if chipping and spreading woody material in the ROW, wood chips will not exceed 3 inches in depth. Distribute chips in discontinuous patches that do not result in a continuous chip mat (<40% of surface covered by 3 inches of chips).
VG-5	Masticated material from spread in the ROW will not exceed a depth of 3-6 inches. Distribute material in discontinuous patches that do not result in a continuous chip mat (<40% of surface covered 3-6 inches thick).
WET-1	Wetland surveys would be conducted at terminal, ROW, ancillary facilities, and along proposed access roads corridors to identify wetland, WUS, and riparian areas located in these areas. Survey information collected would include wetland type, type and cover of hydrophytic and riparian vegetation species present, soil characteristics, site hydrology, global positioning system location of the wetland, and associated information required to determine jurisdictional status. Based on survey results, no surface disturbance including temporary and permanent facilities, the placement of fill material or vegetation clearing for storage, parking, construction activities, or construction work areas as feasible will occur within the avoidance buffer, or surface use restriction defined in the resource management plan for each BLM FO and USFS national forest. If avoidance is not feasible, USACE, BLM, USFS, and USFWS crossing and construction techniques for wetlands and riparian areas will be employed. The wetland crossing and construction techniques will be approved by the USACE, BLM, USFS, and USFWS and will be outlined in the Final POD.

Table C.5-1 Mitigation Measures

Draft EIS Mitigation Measure Number	Mitigation Measures
WET-2	For any features identified during field surveys as jurisdictional under the USACE and EPA guidance under Section 4 of the Clean Water Act, consultation with the USACE will occur prior to construction. Mitigation for these features will be determined in consultation with the USACE and BLM.
WET-3	Access roads will be routed around riparian areas, wetlands, intermittent or perennial drainages, and ephemeral channels to the extent practical. If jurisdictional wetlands or WUS cannot be avoided, USACE approved construction techniques for construction in wetlands and WUS will be applied. BLM and USFS construction techniques for non-jurisdictional wetlands, riparian areas, intermittent drainages, and ephemeral channels would be applied on BLM and USFS lands, as appropriate. These include the use of timber mats, erosion controls, and the placement of equipment outside of the wetland, riparian areas, intermittent drainages, and ephemeral channels boundaries.
Special Status Plant Species	
SS-1	(Species-specific Surveys for Federally-listed Species) – Site- and species-specific surveys for federally listed plant species would be conducted prior to the Biological Assessment (BA) to identify the precise location of known individuals and populations and ground-truth modeled habitats. Surveys would be conducted in areas identified as potential habitat through models developed for the EIS, or from agency provided models for specific species. Surveys would be conducted as described in the TWE Project Special Status Species Survey Plan, and subsequent Survey Plan Memos. Species not requiring surveys prior to the BA would be identified by the USFWS and BLM. For these species, pre-construction surveys would still be required. If individuals or populations are identified during surveys in potential habitat areas, species-specific avoidance through structure and ROW design modifications would be developed and implemented. For species that cannot be avoided, species specific mitigation would need to be developed in consultation with the USFWS and BLM. Species specific mitigation may include compensatory mitigation, and transplanting of individuals.
SS-2	(Species-specific Surveys for Forest Sensitive) - Site- and species-specific surveys for USFS sensitive plant species would be conducted prior to the Biological Evaluation (BE) to identify the precise location of known individuals and populations and ground-truth modeled habitats. Surveys would be conducted in areas identified as potential habitat through models developed for the EIS, or from agency provided models for specific species. Surveys for USFS sensitive species would be conducted only in the national forests crossed by the proposed project. Surveys would be conducted as described in the TWE Project Special Status Species Survey Plan, and subsequent Survey Plan Memos. Species not requiring surveys prior to the BE would be identified by the USFS and BLM. For these species, pre-construction surveys would still be required. If individuals or populations are identified, species-specific avoidance through structure and ROW design modifications would be developed and implemented. If individuals or populations are identified during surveys in potential habitat areas, species-specific avoidance through structure and ROW design modifications would be developed and implemented. For species that cannot be avoided, species specific mitigation would need to be developed in consultation with the USFS and BLM. Species specific mitigation may include compensatory mitigation, and transplanting of individuals.
SS-3	(Species-specific Surveys for BLM Sensitive, NPS Sensitive, and Nevada State Protected Species) - Site- and species-specific surveys for BLM sensitive, NPS sensitive, and Nevada state-protected plant species would be conducted prior to construction to identify the precise location of known individuals and populations and ground-truth modeled habitats. Surveys would be conducted as described in the TWE Project Special Status Species Survey Plan and subsequent Survey Plan Memos. If individuals or populations are identified, species-specific avoidance through structure and ROW design modifications would be developed and implemented.
SS-4	(Avoidance of Ute Ladies'-tresses Orchid Species and Habitat) - Known individuals and populations and areas identified as potential habitat through consultation with the USFWS would be spanned by the transmission line. Surface disturbance associated with facilities, access roads, and other project related construction activities would not occur within the areas identified potential habitat or as having known occurrences. Presence of species in modeled habitat would be assumed for USFWS mitigation purposes. If potential habitat cannot be avoided, 2 years of surveys in potential habitat would be required, and USFWS formal consultation may be necessary.
SS-5	Construction will occur down slope of special status plants and populations where feasible; if surface disturbance must be sited upslope, a 300 ft minimum buffer between surface disturbances and plants and populations will be incorporated. Erosion controls would be implemented at the direction of the BLM, USFS, or USFWS, as appropriate, to prevent sedimentation and erosion from upslope surface disturbance.

Table C.5-1 Mitigation Measures

Draft EIS Mitigation Measure Number	Mitigation Measures
SS-6	A minimum 300-foot buffer distance would be incorporated between federally listed individuals and populations and surface disturbance. Avoidance areas will be visible during construction through fencing, signing, rebar, etc. during construction. Construction and operation traffic will stay on designed routes, and other cleared or approved areas.
SS-7	The Dust Control and Air Quality Plan will include dust abatement measures to minimize impacts to special status plant species; including slower speed limits on unpaved roads, using gravel for roads in occupied habitat and avoidance areas, and the application of water for dust abatement.
SS-8	(Avoidance of Deseret Milkvetch Species and Habitat) - Known individuals and populations and areas identified as ground-truthed suitable habitat would be spanned by the transmission line. Surface disturbance associated with facilities, access roads, and other project related construction activities would not occur within the areas identified as having known occurrences or suitable habitat. Presence of species would be assumed for development of USFWS conservation measures as appropriate.
SS-9	(Avoidance of Clay Phacelia and Minimization of Indirect Impacts) – Known individuals and populations would be spanned by the transmission line. Surface disturbance associated with facilities, access roads, and other project-related construction activities would not occur within the areas identified as having known occurrences or suitable habitat. Additional site specific erosion control measures would be developed with the USFWS and implemented during construction to minimize erosion in areas near known clay phacelia populations.
SS-10	(Avoidance of High Quality Habitats) – In instances where complete habitat avoidance is not possible (due to, for example, topographical, biological, or engineering constraints), all “high quality” habitats as determined during site- and species-specific surveys would be avoided by all direct disturbances during construction and operational activities. High quality habitat are defined as areas that are within the geographic range of the species, have been field verified as having the majority of required habitat characteristics; and/or the species has been observed in the area or near vicinity.
SS-11	(Uinta Basin Hookless Cactus Core Conservation Area Mitigation Measures) – Construction within Uinta Basin Hookless Cactus Level 1 and Level 2 Core Conservation areas will follow the Draft Energy Development Management Guidelines for *Sclerocactus wetlandicus* and *Sclerocactus brevispinus* Core Conservation Areas as appropriate. These include limited to no surface disturbance in core conservation areas; and having an on-site botanist during construction activities. If these measures are not implemented, mitigation measures will need to be developed in consultation with the BLM and USFWS.
Wildlife	
WLF-1	For the protection of breeding migratory birds, WLF-1 requires TWE to avoid migratory bird habitat removal on currently undisturbed lands, to the extent possible, between approximately February 1 and July 31 (depends on state) or, alternately, to conduct breeding migratory bird surveys and implement appropriate mitigation in coordination with the BLM, U.S. Bureau of Reclamation, CPW, NDOW, UDWR, USFS, USFWS, Western, and WGFD. In addition, in order to avoid impacts to raptors during the breeding season (January 1 to August 31 for most eagles, hawks, falcons, and owls and April 15 to September 15 for burrowing owls), TWE would be required to conduct a breeding raptor survey and implement appropriate mitigation measures, such as buffer zones around active nests, as needed.
Special Status Wildlife Species	
SSWS-1	In order to protect nesting mountain plovers, TWE would follow the USFWS 2002 Mountain Plover Survey Guidelines and would conduct mountain plover nest surveys if construction were to occur during the mountain plover breeding season (April 10 to July 10). If a nest is located, a 0.25 mile protection buffer would be implemented around the active nest until the birds fledge from the nest.
SSWS-2	Prior to construction activities in suitable pygmy rabbit habitat, TWE would conduct presence/absence surveys following appropriate protocols. Areas within 0.5 mile of proposed disturbance that show characteristics of pygmy rabbit habitat will be surveyed in accordance with the Interagency Pygmy Rabbit Working Group Survey Protocols (Ulmschneider et al. 2004). If the surveys conclude that pygmy rabbits occur, the “Habitat Preservation and Restoration” conservation measures would apply (Keinath and McGee 2004).

Table C.5-1 Mitigation Measures

Draft EIS Mitigation Measure Number	Mitigation Measures
SSWS-3	Prior to construction activities in suitable Wyoming pocket gopher habitat, TWE would conduct presence/absence surveys following appropriate protocols. If active pocket gopher mounds are identified, the proposed surface disturbing activities would avoid the active pocket gopher mounds by 75 m (BLM 2009). If avoidance of the active pocket gopher mounds by 75 m is not possible, classification surveys (via live capture) must be completed to identify the pocket gopher responsible for the mounds to the species level. If the results conclude that the Wyoming pocket gopher is responsible for the mounds, the "Occupied Wyoming Pocket Gopher Habitat Protection Measures" would apply (BLM 2009). If the results conclude that the associated species is a northern pocket gopher, then the proposed surface disturbance may proceed without mitigation. If the classification survey fails to conclusively identify the associated pocket gopher to the species level, then it will be assumed that the species is a Wyoming pocket gopher and the "Occupied Wyoming Pocket Gopher Habitat Protection Measures" will apply (BLM 2009).
SSWS-4	To avoid and minimize impacts to the desert tortoise and its habitat, TWE would conduct field surveys in identified desert tortoise habitat following approved USFWS protocols. TWE would coordinate with the BLM, Western, Boulder City, Clark County, Nevada, Bureau of Reclamation, and USFWS to implement appropriate mitigation measures during construction, including but not limited to, fencing, preconstruction surveys, and relocating desert tortoises.
SSWS-5	To reduce impacts to greater sage-grouse from operation of the proposed Project, several design features specific to black-footed ferret would be implemented. To limit raptor and corvid predation on greater sage-grouse, TWE would be required to construct anti-perching devices on segments of the proposed Project near high quality greater sage-grouse habitat (e.g., within 4 miles of occupied/active leks, within core areas, within PPH, etc.) in consultation with the BLM, Western, and applicable state wildlife agencies. To limit the potential for greater sage-grouse collisions with guy wires, TWE would be required to outfit guy wires with agency approved bird diverters within high quality greater sage-grouse habitat, or alternatively, to construct alternative structures such as self-supporting steel lattice structures or self-supporting tubular H-frame structures instead of guyed lattice structures within greater sage-grouse habitat.
SSWS – 5A*	- Within 4 miles of leks located within occupied habitat, stipulations would be applied to ROWs. Within 4 miles of a lek in occupied habitat, ROWs would be excluded. Within 4 miles of a lek, but outside occupied habitat, ROWs would be avoided (noise/tall structures); - The activity meets noise restrictions (noise at occupied leks does not exceed 10 decibels above ambient sound levels at sunrise during breeding season); - The activity meets permanent (structure persists through subsequent breeding season) tall structure restrictions (e.g., the structure is not visible from the lek); and - Environmental compliance documents associated with the activity consider how to limit habitat fragmentation (regardless of the GRSG seasonal habitat). Exceptions to the seasonal restrictions and use restrictions could be granted under the following conditions: - If surveys determine that the lek is not active that year, and the proposed activity will not take place beyond the season being excepted; - If surveys determine that the lek is no longer occupied, and the proposed activity will not take place beyond the season being excepted; and - If the project plan and NEPA document demonstrate that impacts from the proposed action can be adequately mitigated.
SSWS-6	To prevent impacts to the western yellow-billed cuckoo during the breeding season, TWE would avoid construction within potentially suitable habitat from March 15 to October 15, or, alternatively, would conduct breeding western yellow-billed cuckoo surveys and implement appropriate mitigation in coordination with the BLM, Western, USFWS, and applicable state wildlife agencies.
SSWS-7	To reduce impacts to Utah prairie dogs, TWE would be required to conduct a preliminary habitat assessment along portions of the proposed Project that is within historic Utah prairie dog habitat. Based on the results of the habitat survey, additional surveys may be required by the USFWS to determine whether occupied habitat occurs within the disturbance footprint of the proposed Project. If occupied habitat is found, appropriate mitigation measures such as reroutes, reducing the width of the ROW, and constructing alternative structures types (e.g. H-frame tubular) with anti-perching devices on transmission line segments within occupied habitat, would be implemented in coordination with the BLM, Western, UDWR, and USFWS.
SSWS-8	To prevent impacts to southwestern willow flycatchers during the breeding season, TWE would avoid construction within suitable habitat from March 15 to October 15, or, alternatively, conduct breeding southwestern willow flycatcher surveys and implement appropriate mitigation in coordination with the BLM, Western, USFWS, and applicable state wildlife agencies.

Table C.5-1 Mitigation Measures

Draft EIS Mitigation Measure Number	Mitigation Measures
SSWS-9	To reduce impacts to black-footed ferret from operation of the proposed Project, several design features specific to black-footed ferret would be implemented. To limit raptor predation on black-footed ferret, TWE would be required to construct anti-perching devices and alternative structure types on segments of the proposed Project near high quality black-footed ferret habitat (e.g., within areas of active white-tailed prairie dog colonies) in consultation with the BLM, Western, and applicable state wildlife agencies.
SSWS-10*	To reduce impacts to Mexican spotted owl in Utah, TWE will ensure that; - No actions will occur within 0.5 mile of an identified nest site; - If nest site activity status is unknown, no activity will occur within the designated Protected Activity Center (PAC); - Avoid placing permanent structures within 0.5 mi of suitable habitat unless surveyed and not occupied; - Reduce noise emissions (e.g., use hospital-grade mufflers) to 45 dBA at 0.5 mile from suitable habitat, including canyon rims (Delaney et al. 1997). Placement of permanent noise-generating facilities should be determined by a noise analysis to ensure noise does not encroach upon a 0.5 mile buffer for suitable habitat, including canyon rims; - Limit disturbances to and within suitable owl habitat by staying on designated routes; and - Limit new access routes created by the project. A permanent action continues for more than one breeding season and/or causes a loss of owl habitat or displaces owls through disturbances, i.e., creation of a permanent structure. For all temporary actions that may impact owls or suitable habitat: - If action occurs entirely outside of the owl breeding season, and leaves no permanent structure or permanent habitat disturbance, action can proceed without an occupancy survey; - If action will occur during a breeding season, survey for owls prior to commencing activity. If owls are found, activity should be delayed until outside of the breeding season; and - Eliminate access routes created by a project through such means as raking out scars, re-vegetation, gating access points, etc. (Temporary activities are defined as those that are completed prior to the start of the following raptor breeding season, leaving no permanent structures and resulting in no permanent habitat loss)
SSWS-11*	To reduce impacts to Canada lynx, TWE would: - Limit disturbance to and within suitable habitat by staying on approved access routes. - Limit new access routes created by the project. - Dirt and gravel roads traversing lynx habitat (particularly those that could become highways) should not be paved or otherwise upgraded (e.g., straightening of curves, widening of roadway etc.) in a manner that is likely to lead to significant increases in traffic volume, traffic speed, increased width of the cleared ROW, or would foreseeably contribute to development or increases in human activity in lynx habitat. - When these types of upgrades are proposed, a thorough analysis of potential direct and indirect impacts to lynx and lynx habitat should be conducted. - Minimize impacts to habitats that support lynx prey.
* Mitigation measure proposed by the BLM Utah State office that will be applied in the State of Utah only.	
Aquatic Biological Resources	
AB-1	(Fish Passage): When avoidance of perennial streams with fish populations is not feasible and a culvert is required during construction, flow would be maintained in a portion of the stream to allow unrestricted fish passage. Any plan for dewatering the stream at the culvert site must be approved by the appropriate federal and state agencies. Culvert size and type would be selected to facilitate the continued and long-term connectivity and movement of target aquatic species. If the culvert is proposed to be in place during project operation, approval must be obtained from the federal or state agency management authority. An alternative crossing method may be required.

Table C.5-1 Mitigation Measures

Draft EIS Mitigation Measure Number	Mitigation Measures
AB-2	(Avoid Game Fish Spawning Periods): If spawning areas for game fish species are known to occur at streams proposed for vehicle crossing or culvert construction, instream disturbance would be scheduled to avoid the spawning period. The exact dates for avoidance would be determined through discussions with WGFD, CPWD, or UDWR. All disturbed areas would be restored to pre-construction conditions prior to the next spawning season.
AB-3	(Invasive Aquatic Species Protection): It is assumed that any waterbody could contain aquatic invasive species and invasive weed species. If work occurs in or near a waterbody, all equipment would be decontaminated. Decontamination would occur before arrival at a project site to avoid the transfer of aquatic invasive species from a previous work site in or near water. Decontamination would consist of either of these actions: 1) Drain all water from equipment and compartments; clean equipment of all mud, plants, debris, and aquatic organisms; and dry equipment for specified time by season (5 days in June through August, 18 days in March through May, and 3 days in December through February when temperatures are at or below freezing); or 2) Use a high pressure (2,500 psi) hot water (140°F) pressure washer to thoroughly clean equipment and flush all compartments that may hold water. A field monitor would be present to ensure that the cleaning was completed prior to vehicle and equipment moving to other streams and drainages.
AB-4	(Herbicide Use Plan): As part of vegetation management, the applicant would prepare an Herbicide Use Plan. The Plan would identify a list of approved herbicides that may be used as well as locations of areas that may be treated. Licensed herbicide applicators would be used in the treatment process. All herbicides would be used in accordance with label instructions for the chemical. The Plan also would discuss compliance with applicable federal, state, and local agencies.
Special Status Aquatic Species	
SSS-1	(Water Use): No new surface water or groundwater withdrawals that are hydrologically connected to streams containing Colorado River cutthroat trout and Bonneville cutthroat trout would be allowed. Any water necessary for construction, operation, or maintenance (including dust abatement) would not be acquired from existing water sources.
SSS-2	(No Permanent Structures or New Roads in Critical Habitat for Federally Listed Fish Species): No permanent structures or new roads would be constructed in critical habitat for federally endangered fish species. Any temporary disturbance to soils in the 100-year floodplain within critical habitat would be minimized to the extent possible and restoration would be completed to maintain existing conditions.
SSS-3	(Avoid Spawning Habitat Disturbance for Special Status Trout Species): If spawning areas for Colorado River cutthroat trout are known to occur at streams proposed for vehicle crossing or culvert construction, instream disturbance would be scheduled to avoid the spawning period from April through May. The exact dates for avoidance would be determined through discussions with WGFD, CPW, or UDWR. All disturbed areas would be restored to pre-construction conditions prior to the next spawning season. The state agencies also would determine if a habitat survey would be required prior to any project disturbance, which would assist in defining habitat conditions for restoration.
SSS-4	(Avoid Spawning Habitat Disturbance for Southern Leatherside Chub): If spawning areas for southern leatherside chub are known to occur at streams proposed for vehicle crossing or culvert construction, instream disturbance would be scheduled to avoid the spawning period from April through June. The exact dates for avoidance would be determined through discussions with UDWR. All disturbed areas would be restored to pre-construction conditions prior to the next spawning season.
SSS-5	(Avoid Direct Disturbance to Habitat for Southern Bonneville Pyrg): No vehicle or equipment disturbance from ROW work or access road construction would be allowed within 300 feet of the unnamed spring located near Thistle Creek that contains southern Bonneville pyrg.
SSS-6	(Survey to Avoid Direct Disturbance to California Floater Habitat): If instream construction is proposed for Currant Creek, a survey would be conducted to determine if California floater is present. If the species is absent, construction would be allowed after meeting UDWR requirements for restoration. If the species is present, relocation would be considered to avoid impacts to it.
SSS-7	(Reduce Crossings of Sowers Creek to Protect Boreal Toad Breeding Habitat): The ROW alignment would be evaluated so that the number of Sowers Creek crossings can be reduced. The portion of the creek crossed by the ROW also would be evaluated as breeding habitat for boreal toad to identify any priority areas that should be avoided if possible.

Table C.5-1 Mitigation Measures

Draft EIS Mitigation Measure Number	Mitigation Measures
SSS-8	(No Vehicle Crossings or New Roads in the Muddy River): No vehicle crossings or new roads would be constructed for the Muddy River. This measure would protect habitat for special status fish species (Virgin River chub, Moapa speckled dace, Moapa White River springfish, Meadow Valley Wash desert sucker, and Meadow Valley Wash speckled dace) in the Muddy River.
SSS-9	(Avoid Direct Disturbance to Abe and Hiway Springs Used by Arizona Toad): No vehicle or equipment disturbance from ROW work or access road construction would be allowed in Abe and Hiway Springs to protect Arizona toad breeding habitat.
Cultural Resources	
No additional mitigation measures cited in this section.	
Visual Resources	
VR-1	Remove pinyon-juniper trees only as necessary for construction and maintenance of transmission towers and access roads. Feather the edges of any clearings. Pinyon-juniper trees in the ROW that are outside of the tower and road construction zone are left in place. Leave other trees in the ROW that would not present a safety or engineering hazard or otherwise interfere with operations. Where feasible, top rather than remove trees that exceed the allowable height. Openings in vegetation for facilities, structures, and roads should mimic, to the extent possible, the size, shape, and characteristics of naturally occurring openings.
VR-2	Use BLM environmental colors (Standard Environmental Colors, Color Chart CC-001, 2008) for surface coatings of permanent buildings, fences, gates, and tanks at terminal sites. Color selection is based on site-specific assessment at each location. Paint grouped structures the same color to reduce visual complexity and color contrast.
VR-3	Locate structures, roads, and other project elements as far back from road, trail, and river crossings (linear KOPs) as possible, and, where feasible, employ terrain and vegetation to screen views from crossings.
VR-4	In areas with no existing transmission lines move the transmission line (reference line) away from the immediate foreground of stationary (non-linear) KOPs to a distance of 0.5 miles or more. Where feasible, approach and cross linear KOPs such as roads and trails at right angles.
VR-5	Materials and surface treatments of transmission line structures, conductors, and insulators, and ancillary structures, and land disturbances should repeat and/or blend with the existing form, line, color, and texture of the landscape and have little or no reflectivity (non-specular).
VR-6	Where paralleling an existing transmission line, where possible, place the structures to match the locations of structures in the existing line.
VR-7	Where possible, position roads at the toe of a slope, at the edge of vegetation openings, and perpendicular with the line of sight.
VR-8	Minimize lighting at terminal and construction facilities to the extent permitted by OSHA and down-shield lights to reduce night glare and light pollution.
VR-9	Where possible in tree-covered moderate to steep terrain, conduct construction operations for towers and conductors with helicopters to reduce the need for access roads and laydown clearings.
Recreation Resources	
REC-1	Where practicable, operation phase vegetation maintenance activities within dispersed 36 recreation areas or key hunting locales would not occur during big game hunting seasons.
REC-2	Within designated recreation management areas, access shall be limited to existing roads whenever practicable. If new and improved access cannot be avoided within these areas, access roads shall be closed or rehabilitated through methods and monitoring developed through consultation with the landowner or land management agency. Methods for closure could include gates, obstructions such as berms or boulders, or partial or full restoration to natural contour or vegetation.
REC-3	If designated corridors exist within the SDA, new roads and ancillary construction areas shall only be located within designated utility corridors.
REC-4	Where practicable, construction activities within key hunting locales such as WHMAs would not occur during big game hunting seasons.

Table C.5-1 Mitigation Measures

Draft EIS Mitigation Measure Number	Mitigation Measures
REC-5	No construction shall be allowed after 5:00 p.m. on weeknights, and no construction shall be allowed on weekends, holidays, or the opening of big game hunting seasons in areas that are adjacent to developed recreation sites.
REC-6	Construction zones will be sited such that access to high use recreational areas and trails is not impeded. If public safety concerns are such that current access or use cannot be maintained, the applicant will work with the appropriate land manager to develop alternative access points or redirect users to alternative existing points of access.
REC-7	Construction shall be scheduled to occur when the fewest students are at Wasatch Academy.
REC-8	Due to the conservation easement, there should be no ground disturbance within the Northwest Manti WMA-Hilltop Unit.
REC-9	The applicant shall plan construction activities to occur outside of specially permitted event areas or times; or work with organizers to ensure adequate access and use if feasible given notice of permit timing.
REC-10	The applicant shall consider the view from key recreational areas in its placement of the 250-foot-wide transmission line ROW to locate the line where it best blends in with the surrounding environment, and/or is collocated with other existing transmission lines.
Land Use	
AGRI-1	Coordinate with farm and ranch operators to identify problems with structure placement and determine structure locations to ensure implementation of design feature TWE-40. Locate structures along fence lines, field lines, or adjacent to roads. Use longer spans between structures to clear fields. Consider use of non-guyed free-standing transmission structures in agricultural areas.
AGRI-2	Schedule construction activities to avoid planting and harvesting activities.
AGRI-3	Minimize locating access roads within the 2-mile transmission line corridor in areas with croplands. For croplands that cannot be avoided by access roads, establish procedures for determining temporary and permanent access road locations with landowners and operators, and establish protection methods for roads over croplands that cannot be avoided by construction activities. Restore locations of temporary access roads to pre-construction conditions and leave permanent access roads intact through mutual agreement with the landowner and operator.
AGRI-4	Minimize the use of guy wires in crop and hay lands to the extent possible. If guy wires have to be used in crop and hay lands, highly visible shield guards will cover the wires.
LU-1	The proponent will develop an approved POD and shall coordinate with land managers on final structure placement, including all aboveground components, access roads, and permanent disturbance areas, to ensure optimal compatible land use.
LU-2	Access roads and other construction facilities shall not be constructed in greater sage grouse foraging areas within the Strawberry Reservoir Management Area.
RANGE-1	Prior to construction of each segment, access road, or ancillary facility crossing a BLM or USFS grazing allotments, TWE shall coordinate with the associated BLM FOand USFS national forest concerning planned development and operations that will occur and identify potential livestock management issues. TWE will provide a schedule and locations of construction activities on affected grazing allotments to the BLM FO and USFS national forest to be provided to the affected grazing permittees. The construction activities schedule and construction activity locations shall be provided on a date early enough to allow grazing permittees sufficient time to make decisions and allocate their resources during the construction time period.
RANGE-2	Prior to construction of transmission line segments, access road, or ancillary facilities, active range improvement locations shall be inventoried. Based on the results of these inventories, no roads, or ancillary facilities would be placed within 200 meters of range improvements, including livestock and wildlife water sources/systems. If avoidance is not feasible, features would be relocated to an alternate location per BLM, USFS, or state wildlife agency guidance.
RANGE-3	Damage to livestock and livestock facilities shall be reported as quickly as possible to BLM, USFS, and affected livestock operators. If damage is caused by the construction, operation/maintenance of this project, TWE will be financially responsible for the replacement of the livestock and/or livestock facilities.

Table C.5-1 Mitigation Measures

Draft EIS Mitigation Measure Number	Mitigation Measures
RANGE-4	The Flagging, Fencing, and Signage Plan would include: Prevention measures to avoid damaging fences, gates, and cattleguards during construction and operation activities. Mitigation to prevent livestock from passing through breaks in fences as a result of construction and operation activities. Measures would include the installation of temporary gates, or cattleguards, and coordination with landowners and grazing permittees. Limit the placement of guy wires where livestock water or where they would fall in stock driveways. Shield guards would be used as appropriate. Upgrading cattleguard gate widths and load-bearing requirements as appropriate for construction and operation vehicles on access roads. Require heavy equipment to use by-pass gates to avoid damage to cattleguards. If a by-pass gate is not already in place, install a by-pass gate adjacent to existing cattleguards to 41 prevent damage by heavy equipment. Mitigation for loss of livestock due to damaged fences and gates that were result of construction and operation activities. Mitigation for loss of livestock as a result of construction and operation vehicle collisions.
RANGE-5	If construction or operation activities disrupt the transport of water to water locations for livestock or wildlife, an alternative water source will be provided until the transport of water is resumed. Alternative water sources could include the hauling of water to watering locations, an alternate pipeline, or the establishment of a temporary watering facility for the livestock and wildlife.
RANGE-6	Prior to construction and placement of permanent facilities and access roads, TWE shall coordinate with the associated BLM Field Office and USFS forest to identify areas where the placement of tower structures, facilities, and access roads would prevent access to either a portion or all of a livestock grazing allotment resulting in the livestock grazing allotment becoming unusable or decreasing the AUMs available to a point that requires the grazing permit to be modified. In these areas, corrective actions would then be identified including rearranging of grazing allotment fences, additional access roads to the grazing allotment, re-arrangement of project facilities and access roads as feasible, etc.
RANGE-7	Speed limits would be followed and signs would be erected in lambing/calving areas, shipping pastures, or adjacent to working corrals to warn vehicle operators of the agricultural operations.
Special Designations	
SDA-1	Within special designation areas, access shall be limited to existing roads whenever practicable. ROWs that currently are not sited within special designation areas shall not be placed within the special designation area during subsequent micro-siting efforts associated with the Plan of Development.
SDA-2	If new or improved access roads cannot be avoided within SDAs, roads shall be closed or rehabilitated through methods developed through consultation with the landowner or land management agency. Methods for closure could include gates, obstructions such as berms or boulders, or partial or full restoration to natural contour or vegetation.
SDA-3	Ground electrode systems shall be sited outside of any designated SDAs located within the ground electrode siting areas.
SDA-4	Within IRAs and other SDA of high scenic quality, Level 2 or Level 3 vegetation management methods would be utilized as needed to reduce impact to wildlife habitat and reduce the level of habitat fragmentation during operations.
SDA-5	Roadless construction techniques shall be applied within all portions of unroaded/undeveloped areas located outside of IRA, until the National Forests have completed their LRMP revisions including IRA and/or wilderness designation decisions.
SDA-6	If designated corridors exist within the SDA, new roads and ancillary construction areas shall only be located within designated utility corridors.
SDA-7	ROW, road, or ground electrode placement within river segments that are eligible for inclusion in the NWSRS shall be micro-sited in coordination with BLM to minimize surface disturbance or visual disturbance from towers, roads, or other facilities to the outstandingly remarkable features that led to segment eligibility.
Transportation and Access	
No additional mitigation measures cited in this section.	

Table C.5-1 Mitigation Measures

Draft EIS Mitigation Measure Number	Mitigation Measures
Social and Economic Resources	
SOCIO-1	TWE must address temporary housing needs in conjunction with a Wyoming Industrial Siting Permit that must be obtained prior to the commencement of construction. That plan should address the combined housing need of the northern terminal, ground electrode, and Spread 1, particularly given potential competition for housing from other development in the area. Local officials should be consulted in the development of that plan. The housing plan should address housing needs associated with construction related indirect and induced jobs that would be supported.
SOCIO-2	TWE should encourage its contractors, to the maximum extent practicable, to purchase materials, equipment and supplies locally, have construction materials delivered on an FOB basis to the counties in which the materials will be utilized, and complete all reports regarding taxable purchases in a timely manner so that proper attribution of sales and use tax payments can occur.
SOCIO-3	TWE should conduct annual coordination meetings with local emergency management officials (law enforcement, fire, health care, state prison. etc.) to review and update emergency coordination and situation management.
SOCIO-4	If not required by existing regulations or included in the various operations plans to be developed (see Section 2.4), TWE should develop and implement a plan for on-going communications with local county and municipal governments to inform them of construction progress, specifically as it relates to the anticipated timing of activity across each spread.
Public Health and Safety	
PH-1	Develop, implement, and maintain a noise complaint reporting and review process to deal with potential queries and issues as they arise. This would include a toll-free telephone number for receiving question or complaints during Project construction and a public liaison person before and during Project construction to respond to concerns over noise.
Wild Horse Management Areas	
WH-1	Construction activities would be suspended as needed during wild horse gathers, as determined through consultation with the BLM.
Lands with Wilderness Characteristics	
No additional mitigation measures cited in this section.	